

q339
.4862131
M132c

WEST VIRGINIA UNIVERSITY BUSINESS AND ECONOMIC STUDIES

Volume 1, No. 4

June, 1951

COMPARATIVE COSTS OF COMPETITIVE FUELS

A Study of Fuel Consumption by Manufacturing
Industries in the United States

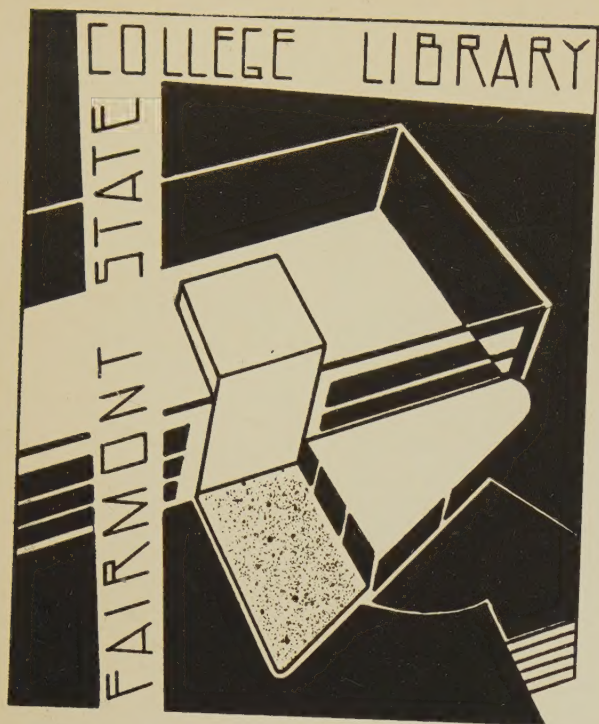
By

Leland W. McCloud



West Virginia State College Library

Bureau of Business Research
Department of Economics and Business Administration
West Virginia University
Morgantown



West Virginia University Bulletin

Series 51, No. 12-4, June, 1951

Entered as second-class matter July 15, 1929,
at the post-office in Morgantown, W. Va.
under the Act of August 24, 1912. Issued Monthly.

COMPARATIVE COSTS OF COMPETITIVE FUELS

A Study of Fuel Consumption by Manufacturing
Industries in the United States

By

Leland W. McCloud, Ph.D.

Statistician and Assistant Director,
Bureau of Business Research and
Assistant Professor, Department of
Economics and Business Administration



Fairmont State College Library

W. V. U. Bureau of Business Research
Department of Economics and Business Administration
West Virginia University
Morgantown

WEST VIRGINIA UNIVERSITY

Irvin Stewart President

Wilson P. Shortridge Dean, College of Arts and Sciences

BUREAU OF BUSINESS RESEARCH

Raymond W. Coleman Director

Leland W. McCloud Statistician and Assistant Director

FOREWORD

"Comparative Costs of Competitive Fuels" is a statistical study of fuel consumption, completed as a result of cooperation among agencies of the federal government, associations representing the fuel industries, as well as individual firms within the industries, and various staff members of West Virginia University.

At the request of the Bituminous Coal Institute, the American Petroleum Institute, and the American Gas Association, the Bureau of the Census published MC203, "Fuels and Electric Energy Consumed" as a part of the *1947 Census of Manufactures*. This publication made available for the first time the necessary data for detailed comparisons of industrial consumption of competitive fuels in the United States.

This study is the result of a suggestion from the Extension Service of the Department of Commerce as to the need for further refinement of statistical data in the *1947 Census of Manufactures*. The study offers data on fuel and electric energy consumed by manufacturing industries for use as heat and power. It is hoped that it will prove useful to producers, distributors, and industrial consumers of fuels.

Raymond W. Coleman

June, 1951

ACKNOWLEDGEMENTS

As is frequently the case in publications of a technical character, the author has benefited from the advice and cooperation of numerous workers in the field of energy fuels and their markets. It is a pleasure to acknowledge the helpfulness and the useful contributions which were made by Mr. George A. Lamb of the Pittsburgh Consolidation Coal Company, Dr. Walter L. Slifer of the Bituminous Coal Institute, and Dr. Vivian E. Spencer of the Bureau of the Census. In addition, I should like to express my appreciation for the valuable assistance rendered by Dr. Elihu Madison of the Texas Company, Dr. Glen L. Parker of the Bureau of Mines, and Mr. J. E. Tobey of Appalachian Coals, Incorporated.

Finally, I should like to express my gratitude to Dr. Erich W. Zimmermann of the University of Texas for having stimulated my interest in the field of fuel resources.

Leland W. McCloud

June, 1951

CONTENTS

INTRODUCTION	1
COMPARATIVE COSTS OF COMPETITIVE FUELS	3
Inter-fuel Competition	3
Additional Cost Considerations	3
An example—Fuel Consumption by Railroads	3
Table 1 Fuel and Power Statistics of Class I Steam Railways in the United States, 1948 and 1949	4
FUELS CONSUMED AND ELECTRIC ENERGY PURCHASED BY MANUFACTURING INDUSTRIES, 1947	5
Table 2 Amounts and Average Costs of Fuels Consumed and Electric Energy Purchased by Manufacturing Industries, by Divisions and States, 1947	6
Table 3 Total Fuel Costs and Inherent Thermal Values of Fuels Consumed and Electric Energy Purchased by Manu- facturing Industries, by Divisions and States, 1947	8
Table 4 Amounts and Average Costs of Fuels Consumed and Electric Energy Purchased by Manufacturing Industries, for States by Metropolitan Areas and Industry Groups, 1947	10
Table 5 Total Fuel Costs and Inherent Thermal Values of Fuels Consumed and Electric Energy Purchased by Manu- facturing Industries, for States by Metropolitan Areas and Industry Groups, 1947	46
APPENDICES	
A. General Explanations of the Basic Data	82
B. Conversion Factors	84
C. List of Counties Included in Metropolitan State Economic Areas	87



Digitized by the Internet Archive
in 2024

<https://archive.org/details/comparativecosts0000lela>

Introduction

This study makes available information about the consumption of eight major competitive fuels and the comparative costs of these fuels per heat unit for manufacturing industry groups in the United States. These fuels are bituminous coal, anthracite coal, coke, fuel oil, natural gas, manufactured gas, mixed gas, and electric energy. The data contained in the tables are of four types. They include the total consumption of each fuel in terms of physical units; the total consumption of each fuel in terms of number of heat units (Btu.);¹ the percentage of the total fuel cost represented by each fuel; and the proportion of the total energy (on a Btu. basis) supplied by each fuel. This information is presented by geographical areas. Table 3 shows in summary form the physical units consumed and the cost per million Btu. of each fuel for the United States, for divisions of states (e.g. New England, Middle Atlantic, etc.), and for individual states. Table 4, with the same geographical divisions, shows the relative importance of each fuel, not only on the basis of the proportion of the total cost represented by each fuel, but also on the basis of the proportion of the total energy supplied by each. In Tables 5 and 6, the information presented is reduced to specific metropolitan areas and industry groups within each state. Thus, it is possible to determine the distribution, the comparative cost (on a Btu. basis), and the relative importance of each fuel in any metropolitan area or in any manufacturing industry group for any state of the Nation.

The information contained in this study should be useful to producers, distributors, and industrial consumers of fuels. Several possible uses of the data may be made by fuel producers and distributors. One of these is to facilitate conclusions concerning the actual or potential markets for fuels. Another is to help firms in these categories to determine their competitive positions in relation to other fuels. A third use is to indicate areas and industries in which additional research or sales effort should be employed. The study should be useful to industrial consumers as a point of departure in determining the most economical fuel for their respective industries. Figures on the cost per heat unit should also prove useful as a basis for comparisons of unit fuel costs by industry groups. Finally, the study should provide information helpful to the planning of industrial develop-

ment programs by indicating the effect of the energy-cost pattern on the location of industries.

In the past, research in the field of energy resources has been confined largely to individual fuels, thus rendering the task of cost and amount comparisons difficult. Consequently, a great deal is known about such individual fuels as coal, gas, and oil; but relatively little is known about these fuels in their cost relationships to each other. There are a number of reasons why statistics of the latter type are not readily available. One reason is to be found in the competitive relationships among the major fuel industries. As a result of this competition, there is little interchange of statistical information. A second reason for the lack of comparable statistics on energy resources is that the various fuels are heterogeneous in nature. Coal is a solid which is usually measured in tons; oil is a liquid which is measured in gallons or barrels; gas is measured in cubic feet; and electric energy is measured in kilowatt-hours. Of these four types of energy resources, no two are measured in the same units; hence, none is directly comparable to any of the others.

In the recent hearings of the Senate Committee on Interior and Insular Affairs, the need for greater coordination among federal government statistical-gathering agencies was emphasized.² Although a great deal remains to be done, significant progress has been made in recent years. As early as 1929, the *Census of Manufactures* included data on the cost and amount of each fuel consumed by manufacturing industries in the United States. Again, in 1937 and 1939, the *Census of Manufactures* contained fuel statistics; but these were limited to the quantities of each fuel and the total cost of all fuels combined, and were not fully comparable to the 1929 figures. It was not until the publication of the 1947 *Census of Manufactures* that more detailed data were made available for comparing the industrial consumption of competitive fuels in the United States. At that time, the Bureau of the Census published Document MC203, entitled, "Fuels and Electric Energy Consumed." Compiled at the request of the Bituminous Coal Institute, the American Petroleum Institute, and the American Gas Association, this document contained basic data on the amount and cost of fuels consumed and the electric energy

¹A Btu. is defined as the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at or near its point of maximum density (39.1°F.).

²Hearing on Senate Resolution 239, "A Resolution to Investigate Available Fuel Reserves and Formulate a National Fuel Policy of the United States," (United States Government Printing Office, Washington, 1950).

purchased by groups of manufacturing industries. The figures in this document are so presented that when reduced to their thermal equivalents, they yield unduplicated totals for the fuel and energy purchased for use in manufacturing. This is possible since it distinguishes between the use of fuel as raw material or for other purposes.³

The present study represents a refinement of the data contained in Census Document MC203. In the tables that follow, inter-fuel comparisons are made possible by the calculation of quantities and costs in terms of heat values. Despite the diverse physical qualities of the eight fuels covered by these statistics, a common characteristic through which they may be compared is found in their heat or energy values.

Certain limitations should be stated about the validity or usefulness of the inter-fuel comparisons presented in this study. One such limitation lies in the use of the British Thermal Unit as a basis of comparison. Two difficulties arise from these comparisons. The first is based on the fact that the thermal values of each type of fuel tend to vary considerably. For example, the heat content of a particular ton of coal may vary substantially from the national average figure of 26,200,000 Btu. per ton. The second difficulty is that the amount and types of work which can be performed by a unit of heat in these various forms of energy are by no means identical. Despite these limitations, engineers have long used this method of comparing fuels, and its use has been accepted by sellers and purchasers of fuels.

In this connection, a question of procedure was encountered in the preparation of the study. It concerned the selection of appropriate conversion factors⁴ for the translation of quantity figures into Btu. values. The problem was essentially that of choosing between a national average conversion factor for each fuel to be used throughout the study and the determination of a conversion factor for each manufacturing industry group and metropolitan area in each state. The latter choice would possibly have resulted in a greater degree of accuracy but was for practical purposes impossible,

due to the great difficulty of compiling accurate information for each industry and area of every state. Therefore, it was decided to use a national average conversion factor for each fuel. However, it was also decided to include in the tables unconverted quantity figures in order that anyone using the data might substitute his own conversion factors based on a more intimate knowledge of a particular industry or area.

A second limitation is that the percentage figures contained in Tables 4 and 6 are based on 97.1 per cent (on a cost basis) of the total fuels and electric energy consumed, a figure representing the eight types of fuel for which both cost and amount figures were available. This discrepancy was caused by the inclusion in the *1947 Census of Manufactures* of an "other fuels" classification, for which cost figures but no amount figures were presented. On a cost basis, this classification comprised 2.9 per cent of the total cost of fuel consumed by manufacturing industries. Because of the absence of amount figures, it was necessary to eliminate the "other fuels" classification from the computations set forth in Tables 4 through 6.

A third limitation applies to the usefulness rather than the accuracy of these data. In general, it is that cost per Btu. of competitive fuels is but one of several factors considered by industrial fuel consumers in making decisions as to the type of fuel to be burned. For this reason, an apparent disadvantage of a particular fuel in cost per Btu. may be offset by superior efficiency of utilization or by some other pertinent factor.

A final limitation on the use of this study is that data are given for "industry groups"⁵ rather than for individual industries. In certain cases, figures relating to a specific industry may vary significantly from the totals for the industry group of which that industry is a part.

In spite of these limitations, it is believed that this study will prove a useful tool in making overall comparisons of various industry groups and areas in the United States. It is recognized that studies of specific industries may require additional, more exact, data available to researchers in these industries.

³1947 *Census of Manufactures*, "Fuels and Electric Energy Consumed," p. 2.

⁴See Appendix B for discussion of conversion factors.

⁵Census classification.

Comparative Costs of Competitive Fuels

Inter-fuel Competition

In 1947, the manufacturing industries, as enumerated in the *Census of Manufactures*, accounted for 24 per cent of the total energy consumed in the United States.⁶ This large industrial fuel market may be thought of as being divided into two parts. The first part includes those industries in which only one type of fuel can be used; the second, those in which two or more fuels can be used. The latter segment, therefore, would represent those industries in which inter-fuel competition exists.

In certain regions of the United States there is little or no inter-fuel competition. The Southwest, for example, in terms of availability of other fuels at competitive prices, is almost entirely restricted to oil and gas. When such a condition exists, a comparison of costs has very little meaning.

Additional Cost Considerations

It has been possible in the present study to indicate those areas and industry groups in which there are varying degrees of inter-fuel competition. However, the selection of a fuel depends on many factors besides the direct cost of the fuel itself. One of these factors, the charges made for transportation of a fuel, is taken into account in this study. The data presented for costs per million Btu. represent delivered costs. Another factor which must be considered in the selection of a fuel is efficiency of utilization, in relation to other fuels, in the uses to which it is to be applied. Added to the considerations of transportation costs and relative efficiency are labor and equipment costs, and also the intangible but definitely influencing factor of a dependable, uninterrupted supply.

These factors which may enter into the choice of a fuel apply most exactly in the case of a consumer who is constructing a new plant. The "sunk costs" in a going concern may prevent the choice of alternative fuels. The expense of converting combustion facilities and the redistribution of labor requirements are two influences which deter shifts from one fuel to another.

The choice of a fuel cannot be made from a cursory examination of statistical tables. It requires detailed, first-hand study by an individual who possesses an intimate knowledge of a specific industry. The example which follows serves to

emphasize the importance of considerations other than the direct cost of a particular fuel.

An Example—Fuel Consumption by Railroads

In the case of railroads, there is available, in addition to the data on the unit costs of various fuels consumed, information on the amount of fuel required to perform a specific amount of work. Table 1, page 4, contains data on Class I steam railways in the United States which show the differences in the relative costs of fuels, in terms of their inherent thermal values and in terms of cost per unit of work performed. In such a case, where the relative efficiency of utilization of various fuels has been taken into consideration, meaningful cost comparisons can be obtained. Unfortunately, it is not possible at this time to make similar comparisons for a manufacturing industry, as data on the efficiency of utilization are not generally available. However, a study of the data on railroads will serve to illustrate how the statistics made available in this study can be used with the specific knowledge of efficiency of utilization possessed by those familiar with a particular industry. The figures in Table 1 indicate that, in both 1948 and 1949, the cost of coal per million Btu. was below that of any other fuel. This was true not only for the entire United States but also in each of the two geographical areas shown. The second cheapest fuel on a Btu. basis, fuel oil, was substantially higher than coal. Yet, in spite of this price advantage on a Btu. basis, in neither year did coal prove to be the cheapest fuel in terms of work performed. Instead, it proved to be more expensive than either diesel fuel or electric energy in all three types of service—switching, road-freight service, and road-passenger service. Figures for the Eastern district and Western district roads show relationships similar to those existing for the entire nation.

Although the cost of electric energy on a Btu. basis was many times the cost of coal, the cost of electric energy on the basis of work performed compared favorably with the cost of coal. Due to the great differences in the nature of electric energy and coal, perhaps a better comparison can be made between coal and diesel fuel. In 1949, the cost of diesel fuel on a Btu. basis was more than three times the cost of coal. Despite the cost advantage in terms of inherent thermal values, the greater efficiency of utilization of diesel fuel rendered fuel costs per unit of work lower for

⁶Harold J. Barnett, "Energy Uses and Supplies, 1939, 1947, 1965," (Washington: Information Circular No. 7582, Bureau of Mines, 1950), p. 14.

**Table 1. Fuel and Power Statistics of Class I Steam Railways
in the United States, 1948 and 1949
(Class I switching and terminal companies included)**

Item	1949				1948			
	Coal	Fuel Oil	Diesel Fuel	Elec- tricity	Coal	Fuel Oil	Diesel Fuel	Elec- tricity
United States								
Unit Costs*	\$5.180	\$1.650	\$0.094	\$0.011	\$5.120	\$2.310	\$0.111	\$0.010
Cost per Million Btu.†	.198	.266	.680	3.115	.195	.373	.762	2.981
Cost of Fuel and Power Consumed:								
Per yard-switching locomotive-hour	2.280	2.460	.603	1.180	2.240	3.350	.662	1.098
Per 1,000 gross ton miles— road freight service	.316	.335	.150	.300	.317	.451	.168	.298
Per passenger train car-mile— road passenger service	.053	.042	.026	.038	.052	.058	.029	.037
Eastern District								
Unit Costs*	5.410	3.020	.097	.011	5.350	3.790	.111	.010
Cost per Million Btu.†	.206	.487	.703	3.194	.204	.611	.804	3.060
Cost of Fuel and Power Consumed:								
Per yard-switching locomotive-hour	2.320	2.840	.613	1.188	2.280	3.570	.680	1.117
Per 1,000 gross ton miles— road freight service	.341	‡	.155	.262	.345	‡	.178	.257
Per passenger train car-mile— road passenger service	.053	.160	.026	.039	.052	.248	.030	.038
Western District								
Unit Costs*	4.640	1.640	.091	.009	4.470	2.300	.101	.009
Cost per Million Btu.†	.177	.265	.658	2.641	.171	.371	.733	2.596
Cost of Fuel and Power Consumed:								
Per yard-switching locomotive-hour	2.140	2.440	.578	1.045	2.030	3.330	.637	.895
Per 1,000 gross ton miles— road freight service	.304	.332	.145	.295	.286	.449	.162	.293
Per passenger train car-mile— road passenger service	.058	.042	.027	.036	.055	.058	.029	.035

*Coal in tons, fuel oil in barrels, diesel fuel in gallons, and electric current in Kw-h.

†Coal converted at 26,200,000 Btu. per ton, fuel oil at 6,200,000 Btu. per barrel, diesel fuel at 138,000 Btu. per gallon, and electric current at 3,412.193 Btu. per Kw-h.

‡Averages not computed. Oil burning steam locomotive used primarily as helpers.

Source: Interstate Commerce Commission, "Fuel and Power Statistics of Class I Steam Railways in the United States," Statement No. M-230 (OS-E), December, 1949.

diesel fuel than for coal for each of the three types of service. The unit fuel costs for yard-switching operations by units using diesel fuel were only slightly more than one-fourth as great as the unit fuel costs for yard-switching operations by units using coal. The cost advantage of diesel fuel over coal was less in road-freight service and road-passenger service than in yard-switching. However, even here the unit fuel costs for diesel fuel were only about one-half as great as were those for coal. Fuel oil used in steam locomotives did not possess similar unit cost advantages. The unit costs for electrically-operated trains compared favorably with coal-powered steam locomotives and unfavorably with diesel-powered trains.

The study of inter-fuel competition is not one which lends itself to a single answer. Individual consumers of fuels in transportation, electric-generation, manufacturing industries, and other commercial and domestic users must consider a multitude of possible combinations of costs and other factors. It is a field of study in which information must be accumulated from many sources to help solve individual problems. The data on comparative costs and consumption in manufacturing industries are presented here as an addition to the information previously available in the field of fuel research.

**Fuels Consumed and Electric Energy Purchased
by Manufacturing Industries, 1947**

**Table 2 - Amounts and Average Costs of Fuels
by Manufacturing Industries,**

DIVISIONS and STATES	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of Tons	Average Cost per Mil. Btu.	Thousands of Tons	Average Cost per Mil. Btu.	Thousands of Tons	Average Cost per Mil. Btu.
UNITED STATES	103,788	\$0.238	7,083	\$0.249	66,172	\$0.444
NEW ENGLAND	5,654	.370	285	.348	389	.623
Maine -----	1,089	.409	3	.515	11	.620
New Hampshire -----	419	.387	102	.322	15	.603
Vermont -----	172	.370	27	.351	9	.679
Massachusetts -----	2,442	.358	60	.398	280	.600
Rhode Island -----	273	.389	13	.408	14	.709
Connecticut -----	1,259	.352	79	.326	59	.706
MIDDLE ATLANTIC	26,523	.240	5,154	.234	23,578	.406
New York -----	7,964	.278	1,129	.281	4,308	.465
New Jersey -----	2,493	.289	1,602	.242	242	.602
Pennsylvania -----	16,065	.214	2,423	.208	19,028	.391
EAST NORTH CENTRAL	43,598	.223	810	.288	27,279	.480
Ohio -----	14,307	.209	232	.253	12,704	.419
Indiana -----	5,793	.200	76	.241	6,389	.524
Illinois -----	10,338	.183	270	.273	5,700	.553
Michigan -----	9,083	.269	146	.344	2,293	.497
Wisconsin -----	4,078	.305	86	.380	193	.672
WEST NORTH CENTRAL	5,685	.219	171	.255	819	.520
Minnesota -----	1,194	.325	34	.296	573	.461
Iowa -----	1,778	.205	34	.253	123	.658
Missouri -----	1,956	.179	42	.233	88	.667
North Dakota -----	101	.152	2	.382	----	1.080
South Dakota -----	117	.199	2	.434	----	.768
Nebraska -----	199	.216	8	.293	12	.735
Kansas -----	340	.169	48	.227	23	.543
SOUTH ATLANTIC	13,816	.247	423	.277	4,956	.399
Delaware -----	279	.280	30	.263	20	.349
Maryland -----	1,421	.250	162	.248	2,470	.433
District of Columbia -----	21	.365	2	.388	----	----
Virginia -----	3,659	.268	45	.353	534	.561
West Virginia -----	3,974	.168	19	.212	1,863	.301
North Carolina -----	2,171	.292	116	.292	16	.643
South Carolina -----	1,393	.304	15	.300	16	.461
Georgia -----	844	.287	32	.279	30	.570
Florida -----	54	.296	2	.403	7	.542
EAST SOUTH CENTRAL	5,954	.216	107	.227	6,263	.415
Kentucky -----	1,522	.203	22	.246	698	.387
Tennessee -----	3,032	.212	23	.304	413	.460
Alabama -----	1,329	.237	53	.179	5,151	.415
Mississippi -----	71	.246	9	.274	1	.637
WEST SOUTH CENTRAL	246	.188	96	.296	330	.555
Arkansas -----	47	.248	16	.216	1	.410
Louisiana -----	31	.211	2	.298	51	.587
Oklahoma -----	136	.150	30	.298	25	.395
Texas -----	32	.242	48	.321	252	.564
MOUNTAIN	1,737	.208	27	.301	1,998	.464
Montana -----	231	.184	----	.373	80	.491
Idaho -----	283	.284	2	.375	40	.568
Wyoming -----	89	.156	1	.252	----	1.040
Colorado -----	709	.186	13	.254	845	.457
New Mexico -----	7	.188	----	.255	----	1.160
Arizona -----	10	.354	7	.392	6	.558
Utah -----	366	.203	3	.245	1,019	.460
Nevada -----	43	.296	----	.200	8	.693
PACIFIC	574	.320	12	.363	561	.676
Washington -----	455	.316	4	.419	23	.704
Oregon -----	105	.338	3	.410	28	.633
California -----	14	.316	5	.286	510	.677

*Amount figures were not available for the "Other fuels" classification contained in the source data. The principal fuels included in this "Other fuels" classification are gasoline, liquefied petroleum gas, and wood. For "Distilled liquors, except brandy," "Lumber and products (except furniture)," "Printing and publishing industries," and "Gum naval stores (steam distilled)," includes cost of some coal, coke, fuel oil, and gas for which separate figures by type of fuel were not reported. The total for "Other fuels" includes \$31,904 thousand reported by forms for these industries which did not segregate, or only partially segregated, fuels by type.

Consumed and Electric Energy Purchased by Divisions and States, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of Kw-h.	Average Cost per Mil. Btu.
166,948	\$0.459	1,238,312	\$0.162	1,347,763	\$0.436	1,418,877	\$0.280	102,826	\$2.721
21,783	.435	----	----	25,696	1.005	----	----	6,090	4.328
1,838	.434	----	----	267	1.329	----	----	795	2.444
683	.456	----	----	157	1.683	----	----	290	4.235
207	.581	----	----	57	1.867	----	----	170	4.282
10,604	.434	----	----	18,977	.900	----	----	2,778	4.606
3,206	.400	----	----	935	1.386	----	----	592	4.943
5,245	.451	----	----	5,304	1.036	----	----	1,465	4.599
47,482	.482	75,277	.341	504,408	.462	507,198	.318	24,319	2.872
12,292	.512	3,742	.534	149,040	.552	3,426	.625	11,572	2.543
15,484	.422	----	----	7,871	1.184	----	----	3,361	3.821
19,705	.509	71,535	.331	347,497	.343	503,773	.306	9,386	2.938
50,233	.503	141,813	.331	523,729	.407	730,792	.290	26,301	3.203
15,018	.542	60,828	.384	100,795	.287	449,898	.285	8,982	2.951
10,330	.448	17,565	.308	304,389	.373	7,876	.418	3,435	3.127
12,774	.476	42,246	.219	43,420	.499	212,272	.306	5,668	3.374
9,405	.524	21,165	.423	70,268	.478	60,746	.257	6,114	3.325
2,705	.544	8	.708	4,858	.965	----	----	2,102	3.587
5,362	.462	103,130	.169	35,604	.415	2,697	.541	4,399	3.407
1,762	.517	11,541	.187	35,125	.361	581	.496	1,013	3.482
532	.521	12,457	.199	358	1.170	81	.495	955	3.244
2,013	.418	25,687	.211	45	1.831	1,845	.548	1,438	3.492
20	.676	157	.285	17	.901	----	----	22	6.187
65	.473	1,080	.190	31	1.497	----	----	40	4.956
304	.495	7,060	.189	28	1.587	191	.636	288	3.323
666	.376	45,147	.129	----	----	----	----	644	3.187
16,344	.425	54,395	.216	185,574	.327	92,802	.235	11,362	2.635
1,807	.465	----	----	201	.929	----	----	265	3.214
5,738	.398	337	.383	160,464	.268	----	----	1,702	3.040
191	.440	28	.962	----	----	200	.646	52	3.538
728	.509	271	.448	574	1.224	----	----	1,120	2.989
1,024	.489	40,860	.228	23,506	.365	92,602	.233	1,544	2.264
676	.557	----	----	375	1.350	----	----	2,913	2.329
1,167	.417	----	----	108	1.527	----	----	1,786	2.239
2,238	.421	9,196	.192	63	1.708	----	----	1,593	2.780
2,775	.379	3,703	.113	283	1.629	----	----	389	4.313
3,234	.547	57,510	.172	8,881	.334	45,524	.195	10,514	1.588
1,009	.503	7,673	.326	1,020	.593	1,943	.377	1,011	2.719
534	.609	8,297	.180	1,012	.742	9	.962	5,030	1.206
1,439	.562	24,269	.143	6,849	.250	43,572	.182	4,078	1.653
252	.510	17,271	.140	----	----	----	----	395	2.879
2,196	.434	593,266	.080	505	.194	----	----	4,988	2.466
330	.496	46,056	.078	----	----	----	----	406	2.969
587	.433	128,381	.085	----	----	----	----	1,726	1.859
176	.379	56,280	.100	----	----	----	----	485	2.867
1,104	.425	362,549	.075	505	.194	----	----	2,371	2.740
2,285	.445	51,289	.137	58,660	.220	11,073	.145	2,279	1.957
100	.478	10,435	.131	----	----	----	----	1,004	1.309
422	.518	----	----	----	2.500	----	----	310	1.627
68	.419	6,991	.108	----	----	----	----	61	3.217
690	.419	11,042	.137	6	1.273	11,073	.145	253	3.465
47	.430	4,612	.137	----	----	----	----	26	5.197
441	.468	8,883	.200	3	2.176	----	----	246	2.362
220	.365	9,325	.107	58,638	.218	----	----	150	3.333
296	.426	----	----	12	1.708	----	----	229	1.539
18,030	.324	161,633	.213	4,705	.780	28,791	.252	12,573	1.668
5,249	.323	----	----	505	1.263	----	----	5,422	1.007
1,978	.382	----	----	737	1.043	----	----	2,198	1.236
10,803	.314	161,633	.213	3,463	.654	28,791	.252	4,954	2.583

†Represents mixture of natural and manufactured gas. Includes all gas reported by establishments that purchase more than one type of gas. Also includes some gas for which the type was not reported.

||Less than 500.

----Zero or not applicable.

Note: Due to rounding, some figures do not add to major totals.

**Table 3 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries,**

DIVISIONS and STATES	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
UNITED STATES	\$3,235,057	7,736,834	100.00	100.00	20.03	35.15	1.39	2.33
NEW ENGLAND	219,648	328,342	100.00	100.00	24.98	45.11	1.14	2.20
Maine -----	23,642	43,118	100.00	100.00	49.37	66.15	.15	.16
New Hampshire -----	11,571	19,265	100.00	100.00	36.67	56.98	7.23	13.49
Vermont -----	5,351	7,309	100.00	100.00	31.10	61.54	4.50	9.38
Massachusetts -----	103,363	151,563	100.00	100.00	22.16	42.22	.59	1.01
Rhode Island -----	21,802	30,253	100.00	100.00	12.79	23.68	.61	1.08
Connecticut -----	53,919	76,832	100.00	100.00	21.52	42.93	1.22	2.62
MIDDLE ATLANTIC	900,183	2,017,353	100.00	100.00	18.56	34.45	3.41	6.49
New York -----	271,292	488,649	100.00	100.00	21.42	42.70	2.97	5.87
New Jersey -----	121,698	223,714	100.00	100.00	15.51	29.20	8.07	18.18
Pennsylvania -----	507,193	1,304,990	100.00	100.00	17.76	32.25	2.53	4.72
EAST NORTH CENTRAL	1,154,547	2,619,963	100.00	100.00	22.09	43.60	.51	.78
Ohio -----	403,960	976,212	100.00	100.00	19.40	38.40	.37	.60
Indiana -----	202,677	452,935	100.00	100.00	15.00	33.51	.23	.42
Illinois -----	256,740	604,355	100.00	100.00	19.35	44.82	.73	1.13
Michigan -----	217,109	446,084	100.00	100.00	29.49	53.35	.59	.83
Wisconsin -----	74,061	140,376	100.00	100.00	44.06	76.11	1.12	1.55
WEST NORTH CENTRAL	132,208	336,978	100.00	100.00	24.63	44.20	.84	1.29
Minnesota -----	38,705	77,525	100.00	100.00	26.31	40.36	.67	1.13
Iowa -----	26,947	70,397	100.00	100.00	35.50	66.17	.81	1.23
Missouri -----	39,862	100,551	100.00	100.00	23.01	50.97	.62	1.06
North Dakota -----	1,034	3,089	100.00	100.00	39.03	85.92	2.25	1.97
South Dakota -----	1,737	4,797	100.00	100.00	35.02	63.68	1.01	.85
Nebraska -----	7,150	16,198	100.00	100.00	15.78	32.17	.85	1.29
Kansas -----	16,774	64,422	100.00	100.00	8.99	13.82	1.65	1.89
SOUTH ATLANTIC	313,421	746,681	100.00	100.00	28.48	48.48	.95	1.44
Delaware -----	10,645	20,791	100.00	100.00	19.27	35.21	1.89	3.68
Maryland -----	73,467	161,637	100.00	100.00	12.67	23.04	1.39	2.55
District of Columbia -----	1,504	2,159	100.00	100.00	13.09	25.00	1.31	2.35
Virginia -----	47,793	119,162	100.00	100.00	53.84	80.45	.85	.95
West Virginia -----	65,027	240,822	100.00	100.00	26.86	43.24	.15	.20
North Carolina -----	43,478	74,557	100.00	100.00	38.19	76.29	1.98	3.94
South Carolina -----	28,158	50,664	100.00	100.00	39.48	72.06	.40	.74
Georgia -----	29,864	52,660	100.00	100.00	21.28	41.98	.75	1.53
Florida -----	13,486	24,230	100.00	100.00	3.09	5.82	.19	.26
EAST SOUTH CENTRAL	183,553	461,176	100.00	100.00	18.34	33.82	.34	.59
Kentucky -----	30,840	77,397	100.00	100.00	26.29	51.51	.45	.72
Tennessee -----	46,426	120,018	100.00	100.00	36.27	66.19	.38	.49
Alabama -----	98,529	240,607	100.00	100.00	8.39	14.47	.24	.56
Mississippi -----	7,748	23,154	100.00	100.00	5.86	7.99	.80	.98
WEST SOUTH CENTRAL	104,062	670,787	100.00	100.00	1.17	.96	.69	.36
Arkansas -----	9,302	53,462	100.00	100.00	3.26	2.29	.95	.76
Louisiana -----	24,950	146,449	100.00	100.00	.68	.55	.05	.03
Oklahoma -----	12,057	66,765	100.00	100.00	4.44	5.34	1.86	1.13
Texas -----	57,754	404,111	100.00	100.00	.35	.21	.68	.30
MOUNTAIN	65,036	190,860	100.00	100.00	14.52	23.84	.31	.35
Montana -----	8,302	23,039	100.00	100.00	13.42	26.22	.05	.04
Idaho -----	5,768	12,145	100.00	100.00	36.52	61.12	.38	.48
Wyoming -----	2,009	10,334	100.00	100.00	18.07	22.56	.32	.25
Colorado -----	20,968	66,653	100.00	100.00	16.50	27.88	.39	.48
New Mexico -----	1,283	5,413	100.00	100.00	2.64	3.34	.20	.19
Arizona -----	5,367	13,467	100.00	100.00	1.66	1.87	1.28	1.30
Utah -----	18,881	55,874	100.00	100.00	10.30	17.14	.09	.13
Nevada -----	2,459	3,935	100.00	100.00	13.50	28.50	.02	.06
PACIFIC	162,398	364,694	100.00	100.00	2.96	4.13	.07	.09
Washington -----	33,684	63,932	100.00	100.00	11.18	18.66	.14	.17
Oregon -----	15,760	23,665	100.00	100.00	5.89	11.60	.19	.31
California -----	112,954	277,097	100.00	100.00	.10	.13	.03	.05

*The cost figures for the "Other fuels" classification contained in the source data were eliminated in making the computations of the proportion of total fuel costs accounted for by each type of fuel since no amount figures for this "Other fuels" classification were available which would have permitted a corresponding computation of the proportion of total energy supplied by each type of fuel. This "Other fuels" classification accounted for 2.9 per cent of the total cost of fuel and electric energy consumed by manufacturing industries in the United States in 1947.

of Fuels Consumed and Electric Energy Purchased by Divisions and States, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
22.55	21.21	14.68	13.38	6.51	16.81	2.56	2.46	2.77	4.14	29.51	4.53
2.73	2.94	26.76	41.13	----	----	3.44	2.29	----	----	40.94	6.33
.70	.62	20.92	26.43	----	----	.81	.33	----	----	28.04	6.29
1.98	1.97	16.69	21.99	----	----	1.23	.44	----	----	36.20	5.13
2.90	3.12	13.96	17.58	----	----	1.07	.42	----	----	46.48	7.95
4.03	4.58	27.60	43.38	----	----	3.38	2.56	----	----	42.24	6.25
1.17	1.19	36.45	65.71	----	----	3.21	1.67	----	----	45.77	6.67
1.91	1.90	27.22	42.32	----	----	5.50	3.73	----	----	42.63	6.51
26.40	28.98	15.75	14.59	2.99	3.92	3.50	3.38	2.91	4.08	26.48	4.11
18.30	21.86	14.38	15.60	.77	.80	4.43	4.45	.72	.64	37.01	8.08
2.97	2.68	33.30	42.91	----	----	4.13	1.90	----	----	36.01	5.13
36.36	36.16	12.27	9.36	4.90	5.76	2.86	3.23	4.77	6.06	18.55	2.45
28.13	25.82	13.56	11.89	4.27	5.68	2.56	2.77	3.96	6.03	24.90	3.43
32.70	32.27	12.50	9.54	6.08	6.54	.90	1.29	5.66	8.21	22.39	3.14
40.99	34.98	14.16	14.14	2.81	4.07	7.26	8.71	1.47	1.58	18.08	2.59
30.46	23.39	14.70	13.10	3.78	7.34	1.35	1.15	4.22	5.86	25.42	3.20
13.00	12.75	14.08	13.07	4.33	4.98	2.39	2.43	4.18	7.91	31.95	4.68
4.34	3.41	12.32	11.95	.01	.01	3.42	1.87	----	----	34.73	5.11
7.98	6.03	11.61	9.86	13.88	32.13	1.38	1.30	1.00	.73	38.68	4.45
16.93	18.33	14.60	14.09	5.86	15.63	3.85	5.33	.68	.68	31.10	4.46
7.44	4.33	6.37	4.68	9.66	18.58	.84	.27	.13	.10	39.24	4.63
3.65	2.17	13.08	12.41	14.27	26.82	.11	.02	2.30	1.66	42.97	4.88
.26	.08	7.99	3.95	4.55	5.34	.79	.29	----	----	45.12	2.44
.44	.21	11.04	8.45	12.37	23.64	1.44	.35	----	----	38.67	2.82
3.19	1.91	13.06	11.65	19.64	45.76	.33	.09	1.54	1.07	45.61	6.06
1.83	.88	9.27	6.41	36.52	73.59	----	----	----	----	41.75	3.41
15.63	16.46	13.73	13.57	3.94	7.65	2.28	2.93	2.40	4.27	32.59	5.19
1.60	2.35	48.99	53.89	----	----	.95	.52	----	----	27.30	4.35
36.12	37.89	19.30	22.01	.18	.22	6.31	10.69	----	----	24.02	3.59
----	----	34.60	54.76	1.86	1.34	----	----	7.81	8.42	41.34	8.14
15.54	11.11	4.80	3.79	.27	.24	.79	.26	----	----	23.90	3.21
21.35	19.19	4.77	2.64	15.04	17.82	2.11	1.56	11.37	13.18	18.34	2.19
.61	.55	5.36	5.62	----	----	.63	.27	----	----	53.24	13.33
.64	.78	10.71	14.28	----	----	.32	.12	----	----	48.45	12.03
1.42	1.41	19.57	26.35	6.20	18.34	.20	.06	----	----	50.59	10.32
.74	.76	48.41	71.01	3.26	16.05	1.84	.63	----	----	42.46	5.48
35.10	33.68	5.98	4.35	5.65	13.09	.69	.83	2.87	5.86	31.04	7.78
21.70	22.35	10.20	8.08	8.51	10.41	.29	.19	2.15	2.28	30.41	4.46
10.17	8.54	4.34	2.76	3.37	7.26	.87	.46	.02	.01	44.58	14.30
53.78	53.09	5.09	3.71	3.70	10.59	.79	1.30	4.66	10.50	23.35	5.78
.26	.14	10.28	6.75	32.66	78.32	----	----	----	----	50.13	5.83
4.36	1.22	5.68	2.03	47.74	92.87	.03	.03	----	----	40.34	2.54
.14	.06	10.92	3.83	40.49	90.46	----	----	----	----	44.24	2.59
2.99	.87	6.31	2.48	46.08	92.05	----	----	----	----	43.88	4.02
2.00	.91	3.42	1.63	48.91	88.51	----	----	----	----	39.37	2.48
6.12	1.55	5.03	1.69	49.38	94.20	.06	.04	----	----	38.37	2.00
35.33	25.96	9.70	7.42	11.36	28.22	3.14	4.86	2.24	5.26	23.40	4.07
11.76	8.62	3.57	2.69	17.23	47.56	----	----	----	----	53.98	14.86
9.72	8.13	23.48	21.55	----	----	.01	----	----	----	29.90	8.72
.26	.05	8.86	4.11	39.32	71.03	----	----	----	----	33.17	2.00
45.71	31.45	8.55	6.42	7.58	17.40	.02	.01	6.96	15.07	14.28	1.30
.23	.05	9.68	5.34	51.61	89.46	----	----	----	----	35.64	1.63
1.44	1.03	23.86	20.30	34.79	69.26	.07	.01	----	----	36.89	6.23
61.65	45.25	2.64	2.44	5.54	17.52	10.72	16.60	----	----	9.05	.92
5.32	4.79	31.76	46.61	----	----	.45	.17	----	----	48.95	19.88
5.79	3.82	22.30	30.65	22.29	46.54	1.22	.70	1.31	2.32	44.05	11.76
1.20	.90	31.18	50.90	----	----	1.02	.43	----	----	55.28	28.94
2.76	2.90	29.73	51.82	----	----	2.64	1.68	----	----	58.79	31.68
7.58	4.57	18.61	24.17	32.05	61.25	1.08	.67	1.89	3.06	38.65	6.10

†Represents mixtures of natural and manufactured gas. Includes all gas reported by establishments that purchase more than one type of gas. Also includes some gas for which the type was not reported.

‡Indicates percentages which were less than .005 per cent or which were based on amount or cost figures of less than 50.

----Zero or not applicable.

Note: Due to rounding, some figures do not add to major totals.

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of Tons	Average Cost per Mil. Btu.	Thousands of Tons	Average Cost per Mil. Btu.	Thousands of Tons	Average Cost per Mil. Btu.
NEW ENGLAND						
MAINE	1,088.7	\$0.409	2.8	\$0.515	10.8	\$0.620
Metropolitan Area A	120.4	.420	0.6	.467	1.7	.652
All other counties	968.3	.408	2.2	.528	9.1	.614
Industry Groups						
Food and kindred products	35.9	.480	1.2	.567	0.5	.677
Textile mill products	98.0	.414	----	----	----	----
Apparel and related products	24.1	.378	0.1	.960	----	----
Lumber and products, except furniture	2.5	.316	0.1‡	.560‡	----	----
Furniture and fixtures	1.2	.315	----	----	----	----
Paper and allied products	846.5	.408	----	----	----	----
Printing and publishing industries§	0.8	.438	----	----	----	----
Chemicals and allied products	5.1	.445	----	----	----	----
Rubber products		----	----	----	----	----
Leather and leather products	10.0	.421	0.2	.490	0.5	.548
Stone, clay, and glass products	49.3	.363	----	----	0.1	.520
Primary metal industries	0.3	.430	0.2	.471	0.9	.749
Fabricated metal products	3.4	.526	0.5	.465	1.3	.646
Machinery (except electrical)	1.7	.533	0.1	.440	7.4	.601
Transportation equipment	7.6	.420	0.1	.240	0.1	.600
Miscellaneous manufactures	2.3	.456	0.3	.184	----	----
NEW HAMPSHIRE	419.0	.387	102.3	.322	15.3	.603
Metropolitan Area A	63.9	.382	0.6	.566	3.7	.610
All other counties	355.1	.387	101.7	.321	11.6	.600
Industry Groups						
Food and kindred products	6.1	.423	0.3	.263	0.1	.360
Textile mill products	64.2	.387	2.0	.429	9.4	.565
Apparel and related products	0.6	.427	----	----	----	----
Lumber and products, except furniture	2.9	.361	0.2‡	.255‡	----	----
Furniture and fixtures	1.3	.375	----	----	----	----
Paper and allied products	261.1	.386	95.2	.314	----	----
Printing and publishing industries§	0.3	.443	----	----	----	----
Chemicals and allied products	2.5	.398	----	----	----	----
Leather and leather products	47.0	.364	1.6	.438	----	----
Stone, clay, and glass products	14.1	.434	0.8	.493	2.1	.683
Primary metal industries	3.9	.364	0.6	.250	2.9	.638
Fabricated metal products	1.5	.394	0.2	.843	0.2	.400
Machinery (except electrical)	8.5	.396	0.4	.461	0.6	.638
Electrical machinery	0.3	.430	0.8	.394	----	----
Instruments and related products	0.1	.385	----	----	----	----
Miscellaneous manufactures	3.0	.457	0.2	.451	----	----
VERMONT	171.7	.370	27.0	.351	9.2	.679
Industry Groups						
Food and kindred products	12.5	.377	2.4	.418	----	----
Textile mill products	52.7	.358	3.3	.393	0.2	.520
Apparel and related products	0.2	.404	0.2	.471	----	----
Lumber and products, except furniture	4.9	.315	0.1‡	.440‡	----	----
Furniture and fixtures	4.2	.343	0.1	.480	----	----
Paper and allied products	58.6	.382	17.4	.325	----	----
Printing and publishing industries§	0.3	.354	0.1	.840	----	----
Chemicals and allied products	2.9	.393	0.1	.720	0.1	.280
Leather and leather products	2.7	.389	----	----	----	----
Stone, clay, and glass products	9.3	.396	2.7	.325	0.7	.563
Primary metal industries	0.6	.331	----	----	3.8	.684
Fabricated metal products	2.3	.340	0.2	.765	0.1	.640
Machinery (except electrical)	12.6	.372	0.1	.360	4.2	.717
Miscellaneous manufactures	4.6	.360	0.1	1.080	----	----
MASSACHUSETTS	2,442.2	.358	60.4	.398	280.0	.600
Metropolitan Area A	406.2	.336	22.1	.385	12.2	.698
Metropolitan Area B	390.2	.366	6.2	.453	21.9	.715

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of Kw-h.	Average Cost per Mil. Btu.
1,838.3	\$0.434	----	----	267.4	\$1.329	----	----	795.1	\$2.444
125.4	.449	----	----	203.4	1.232	----	----	55.3	3.405
1,712.9	.433	----	----	64.0	1.636	----	----	739.8	2.372
100.0	.515	----	----	157.5	1.267	----	----	21.5	5.519
416.8	.424	----	----	2.5	1.286	----	----	139.0	3.110
1.8	1.286	----	----	5.3	1.655	----	----	10.1	2.945
33.6	.613	----	----	----	----	----	----	31.6	4.866
0.5	.548	----	----	0.3	1.500	----	----	1.8	4.574
1,106.4	.416	----	----	1.0	2.200	----	----	494.1	1.706
5.3	.556	----	----	13.1	1.662	----	----	3.5	5.521
22.7	.388	----	----	0.1	1.000	----	----	6.8	3.853
2.4	.436	----	----	----	----	----	----	0.9	4.290
54.1	.482	----	----	2.5	1.929	----	----	18.8	4.548
2.2	.676	----	----	0.3	2.000	----	----	23.3	2.326
2.2	.588	----	----	14.0	1.211	----	----	2.2	4.480
43.0	.500	----	----	52.4	1.240	----	----	6.8	4.306
20.3	.488	----	----	13.5	1.740	----	----	22.3	3.355
25.4	.452	----	----	4.2	1.435	----	----	10.9	4.360
1.5	.742	----	----	0.5	1.667	----	----	1.1	5.816
683.2	.456	----	----	157.0	1.683	----	----	289.9	4.235
323.5	.426	----	----	80.0	1.637	----	----	134.6	4.077
359.7	.483	----	----	77.0	1.731	----	----	155.3	4.372
26.9	.590	----	----	12.8	1.942	----	----	6.4	5.683
447.4	.427	----	----	11.5	1.645	----	----	124.4	3.855
7.6	.539	----	----	0.3	1.500	----	----	2.9	4.690
17.6	.555	----	----	----	----	----	----	17.6	5.243
2.6	.503	----	----	1.9	1.900	----	----	3.6	5.902
89.0	.450	----	----	43.3	1.479	----	----	64.7	3.204
5.7	.567	----	----	13.9	1.933	----	----	4.0	5.522
0.8	.660	----	----	0.2	3.000	----	----	0.8	6.481
36.7	.493	----	----	11.4	1.952	----	----	28.3	5.625
18.9	.550	----	----	5.5	1.667	----	----	8.8	4.467
3.0	.677	----	----	5.0	1.778	----	----	1.2	5.585
5.7	.603	----	----	8.8	1.896	----	----	4.6	5.732
15.9	.525	----	----	10.1	1.982	----	----	15.7	5.015
1.5	.538	----	----	3.8	1.905	----	----	1.6	6.327
2.0	.492	----	----	2.4	2.154	----	----	0.5	5.941
0.8	.680	----	----	2.0	2.000	----	----	2.3	6.269
207.3	.581	----	----	57.0	1.867	----	----	170.2	4.282
18.8	.611	----	----	8.5	1.717	----	----	10.1	5.258
2.4	.584	----	----	0.2	2.000	----	----	19.2	4.446
1.0	.742	----	----	1.3	2.000	----	----	0.7	7.167
25.9	.537	----	----	----	----	----	----	16.3	5.784
1.3	.765	----	----	----	----	----	----	4.8	4.378
1.6	.495	----	----	----	----	----	----	38.9	2.873
0.4	.640	----	----	6.4	1.886	----	----	1.6	6.727
32.4	.546	----	----	0.4	2.000	----	----	2.7	4.924
0.3	.684	----	----	----	----	----	----	1.2	4.683
42.5	.547	----	----	10.1	2.000	----	----	23.5	5.060
5.6	.723	----	----	0.3	2.000	----	----	2.4	5.012
6.2	.643	----	----	1.3	2.000	----	----	2.6	4.764
31.3	.560	----	----	20.2	1.945	----	----	27.6	4.088
2.6	.652	----	----	1.1	2.000	----	----	4.0	4.772
10,603.5	.434	----	----	18,976.7	.900	----	----	2,777.9	4.606
758.2	.497	----	----	493.1	1.606	----	----	449.3	4.100
2,003.4	.454	----	----	1,339.6	1.255	----	----	439.3	4.732

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of Tons	Average Cost per Mil. Btu.	Thousands of Tons	Average Cost per Mil. Btu.	Thousands of Tons	Average Cost per Mil. Btu.
NEW ENGLAND—continued						
MASSACHUSETTS—continued						
Metropolitan Area C	1,079.5	\$0.371	24.1	\$0.394	226.0	\$0.575
Metropolitan Area D	21.3	.375	2.9	.391	5.1	.749
Metropolitan Area E	177.1	.392	3.4	.433	9.4	.684
All other counties	367.9	.318	1.7	.361	5.4	.680
Industry Groups						
Food and kindred products	112.1	.391	5.9	.517	10.3	.534
Tobacco manufactures	0.1	.577	0.1	.360	----	----
Textile mill products	615.9	.370	7.2	.328	1.6	.617
Apparel and related products	12.9	.357	0.4	.539	0.3	.527
Lumber and products, except furniture	6.1	.370	0.2†	.549†	----†	----†
Furniture and fixtures	21.7	.405	1.3	.318	0.6	.591
Paper and allied products	660.2	.325	19.7	.369	0.5	.556
Printing and publishing industries§	5.4	.426	0.6	.651	1.2	.188
Chemicals and allied products	167.7	.374	2.4	.264	0.3	.838
Petroleum and coal products	22.2	.343	----	----¶	----	----¶
Rubber products	139.6	.366	0.2	.510	0.1	.840
Leather and leather products	160.2	.373	2.8	.361	0.5	.185
Stone, clay, and glass products	69.1	.354	3.4	.469	6.5	.594
Primary metal industries	68.3	.361	7.5	.393	227.4	.592
Fabricated metal products	48.8	.349	1.9	.484	8.8	.681
Machinery (except electrical)	150.9	.372	3.9	.477	20.3	.725
Electrical machinery	115.5	.368	0.5	.520	0.5	.694
Transportation equipment	14.1	.354	1.0	.327	0.1	.480
Instruments and related products	14.8	.373	0.5	.283	----	----¶
Miscellaneous manufactures	36.6	.378	0.9	.406	1.0	.488
RHODE ISLAND	273.4	.389	12.9	.408	14.5	.709
Metropolitan Area A	247.9	.392	12.6	.406	13.8	.710
All other counties	25.5	.359	0.3	.513	----	----¶
Industry Groups						
Food and kindred products	4.0	.313	0.7	.365	0.6	.537
Textile mill products	184.0	.376	7.1	.430	----	----¶
Apparel and related products	0.1	.615	----	----¶	----	----
Lumber and products, except furniture	1.3	.419	----†	----†	----†	----†
Furniture and fixtures	0.4	.448	----	----¶	----	----
Paper and allied products	30.3	.498	1.3	.248	----	----
Printing and publishing industries§	0.6	.401	0.1	.320	----	----
Chemicals and allied products	9.0	.386	0.1	.440	----	----¶
Petroleum and coal products	6.0	.196	0.1	.120	0.3	.432
Rubber products	2.7	.386	----	----	0.7	.672
Stone, clay, and glass products	0.8	.400	0.1	.200	----	----¶
Primary metal industries	7.4	.313	0.2	.961	3.5	.747
Fabricated metal products	9.4	.404	0.3	.513	0.7	.569
Machinery (except electrical)	12.1	.488	1.7	.435	8.4	.741
Electrical machinery	1.9	.325	0.7	.376	----	----
Instruments and related products	0.1	.423	----	----	----	----
Miscellaneous manufactures	3.2	.368	0.4	.314	0.2	.400
CONNECTICUT	1,258.8	.352	79.2	.326	58.9	.706
Metropolitan Area A	246.2	.352	29.1	.316	15.3	.717
Metropolitan Area B	453.4	.353	20.5	.327	18.8	.708
Metropolitan Area C	202.5	.334	9.6	.401	16.1	.745
All other counties	356.7	.360	20.0	.305	8.7	.610
Industry Groups						
Food and kindred products	7.6	.317	11.4	.244	1.1	.546
Textile mill products	251.9	.364	22.5	.272	0.2	.680
Apparel and related products	5.8	.357	0.2	.471	----	----
Lumber and products, except furniture	3.6	.263	0.1†	.240†	----¶	----¶
Furniture and fixtures	1.8	.261	0.2	.294	----	----
Paper and allied products	169.4	.357	0.1	.360	----	----
Printing and publishing industries§	2.0	.338	2.3	.401	----	----¶
Chemicals and allied products	80.8	.385	2.7	.277	----	----¶
Rubber products	15.2	.377	----	----	----	----

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of Kw-h.	Average Cost per Mil. Btu.
6,102.8	\$0.418	----	----	16,394.5	\$0.648	----	----	1,151.0	\$4.934
173.1	.490	----	----	76.0	1.407	----	----	39.6	5.813
1,051.9	.416	----	----	490.1	1.260	----	----	438.5	4.210
514.1	.464	----	----	183.4	1.547	----	----	260.2	4.302
1,122.7	.428	----	----	684.6	1.447	----	----	192.3	4.785
5.8	.417	----	----	0.1	1.000	----	----	0.7	5.833
2,939.4	.408	----	----	77.5	1.526	----	----	677.5	4.274
87.4	.458	----	----	50.4	1.662	----	----	28.6	8.610
35.7	.552	----	----	3.6‡	1.895‡	----	----	14.5	7.917
23.1	.530	----	----	12.0	1.692	----	----	16.5	7.586
878.3	.450	----	----	27.0	1.801	----	----	310.3	4.168
69.7	.518	----	----	149.5	1.550	----	----	48.3	6.992
787.8	.395	----	----	103.0	1.342	----	----	155.3	3.915
87.1	.434	----	----	14,473.1	.095	----	----	43.1	3.808
320.3	.423	----	----	32.3	1.466	----	----	217.7	3.650
264.9	.488	----	----	85.3	1.401	----	----	83.6	6.795
315.7	.459	----	----	85.5	1.416	----	----	43.3	5.177
945.7	.483	----	----	999.5	1.204	----	----	155.0	4.582
423.3	.564	----	----	589.7	1.373	----	----	135.6	5.325
1,114.0	.412	----	----	547.7	1.458	----	----	226.9	5.000
439.4	.411	----	----	661.0	1.285	----	----	215.0	4.215
288.3	.398	----	----	57.0	1.506	----	----	76.7	4.453
118.4	.415	----	----	106.1	1.496	----	----	25.8	4.682
336.5	.469	----	----	231.8	1.625	----	----	111.2	5.074
3,206.3	.400	----	----	934.7	1.386	----	----	591.7	4.943
2,994.1	.400	----	----	898.0	1.388	----	----	581.7	4.923
212.2	.402	----	----	36.7	1.328	----	----	10.0	6.091
141.1	.431	----	----	81.7	1.472	----	----	20.6	5.703
1,875.2	.393	----	----	113.4	1.440	----	----	316.7	4.760
7.6	.484	----	----	3.5	1.789	----	----	2.4	7.329
0.4	.600	----	----	0.1‡	1.000‡	----	----	1.1	8.368
6.2	.500	----	----	1.4	1.875	----	----	0.9	8.097
69.7	.418	----	----	7.8	1.452	----	----	25.0	3.894
12.5	.476	----	----	21.1	1.553	----	----	5.0	7.216
98.9	.395	----	----	15.7	1.647	----	----	21.8	4.091
124.5	.381	----	----	0.6	2.333	----	----	1.0	5.824
157.4	.396	----	----	12.9	1.543	----	----	36.3	4.547
107.4	.403	----	----	181.9	.851	----	----	7.8	4.327
324.1	.385	----	----	133.6	1.294	----	----	40.9	4.524
64.4	.464	----	----	68.9	1.608	----	----	21.6	5.958
79.6	.435	----	----	113.0	1.520	----	----	41.2	5.329
37.1	.419	----	----	29.9	1.584	----	----	26.3	4.766
3.8	.500	----	----	10.2	1.909	----	----	2.0	7.441
94.0	.448	----	----	138.7	1.685	----	----	20.7	7.715
5,244.7	.451	----	----	5,303.7	1.036	----	----	1,464.8	4.599
1,419.3	.444	----	----	1,070.7	1.300	----	----	366.8	4.502
1,414.7	.450	----	----	2,955.6	.835	----	----	501.7	4.351
1,324.4	.459	----	----	961.3	1.230	----	----	413.6	4.473
1,086.3	.453	----	----	316.1	1.430	----	----	182.7	5.761
171.8	.503	----	----	125.7	1.412	----	----	37.7	5.437
989.0	.427	----	----	54.7	1.420	----	----	103.6	5.439
24.4	.531	----	----	26.5	1.601	----	----	7.7	8.829
4.2	.592	----	----	0.2‡	2.000‡	----	----	2.2	8.600
9.2	.602	----	----	25.7	1.338	----	----	4.8	5.902
274.0	.435	----	----	12.6	1.485	----	----	36.7	4.414
37.7	.503	----	----	132.7	1.384	----	----	18.4	6.850
182.2	.448	----	----	47.1	1.323	----	----	101.9	3.652
213.7	.407	----	----	10.5	1.474	----	----	79.0	3.901

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
NEW ENGLAND—continued						
CONNECTICUT—continued						
Leather and leather products	0.7	\$0.399	0.2	\$0.882	----	\$----
Stone, clay, and glass products	21.9	.329	4.6	.409	----	----
Primary metal industries	304.5	.334	5.3	.494	30.6	.732
Fabricated metal products	132.4	.339	8.6	.452	8.1	.691
Machinery (except electrical)	66.9	.374	2.1	.358	16.5	.674
Electrical machinery	70.7	.347	1.8	.444	0.5	.694
Transportation equipment	16.6	.315	0.2	.843	0.9	.637
Instruments and related products	18.7	.353	1.4	.452	----	----
Miscellaneous manufactures	80.6	.369	15.3	.267	1.0	.734
MIDDLE ATLANTIC						
NEW YORK	7,964.1	.278	1,129.4	.281	4,307.5	.465
Metropolitan Area A	1,771.1	.252	142.5	.302	3,846.4	.454
Metropolitan Area B	559.4	.277	16.7	.319	14.6	.644
Metropolitan Area C	915.0	.286	51.9	.289	120.3	.515
Metropolitan Area D	318.3	.287	24.6	.257	11.2	.702
Metropolitan Area E	162.9	.275	16.9	.220	1.3	.689
Metropolitan Area F	488.2	.302	36.3	.311	194.8	.498
Metropolitan Area G	990.1	.303	326.4	.299	53.1	.652
All other counties	2,759.1	.279	514.1	.262	65.8	.664
Industry Groups						
Food and kindred products	857.4	.288	160.9	.335	9.7	.584
Tobacco manufactures	1.7	.434	0.6	.500	----	----
Textile mill products	586.9	.285	32.5	.244	0.5	.565
Apparel and related products	110.6	.285	54.8	.291	1.3	.407
Lumber and products, except furniture	31.2	.266	1.5‡	.423‡	0.1‡	.960‡
Furniture and fixtures	108.7	.258	3.9	.381	1.7	.365
Paper and allied products	1,161.7	.293	524.3	.243	0.1	.760
Printing and publishing industries§	30.0	.285	12.3	.395	1.2	.557
Chemicals and allied products	1,859.5	.276	44.9	.290	132.2	.472
Petroleum and coal products	147.7	.249	9.7	.287	1.3	.214
Rubber products	95.3	.259	9.9	.208	----	----
Leather and leather products	157.4	.283	5.3	.324	1.3	.339
Stone, clay, and glass products	976.1	.261	44.3	.295	5.0	.589
Primary metal industries	520.6	.281	66.1	.316	3,994.8	.458
Fabricated metal products	107.1	.291	18.0	.374	42.4	.660
Machinery (except electrical)	355.1	.275	38.9	.358	39.6	.669
Electrical machinery	260.8	.282	51.7	.308	65.3	.565
Transportation equipment	245.9	.260	4.5	.480	9.6	.727
Instruments and related products	192.0	.280	15.6	.259	0.7	.615
Miscellaneous manufactures	158.4	.284	29.7	.277	0.7	.316
NEW JERSEY	2,493.1	.289	1,601.5	.242	241.8	.602
Metropolitan Area A	17.8	.302	64.8	.196	11.5	.698
Metropolitan Area B	1,667.0	.291	1,250.5	.249	168.1	.587
Metropolitan Area C	221.1	.281	89.7	.232	14.6	.640
Metropolitan Area D	390.7	.287	67.1	.263	39.3	.612
Metropolitan Area E	12.1	.319	0.4	.471	0.3	.162
Metropolitan Area F	18.0	.278	4.7	.306	0.1	.440
All other counties	166.4	.280	124.3	.180	7.9	.680
Industry Groups						
Food and kindred products	177.7	.319	18.7	.395	4.3	.553
Tobacco manufactures	9.1	.314	5.1	.252	----	----
Textile mill products	304.2	.289	155.8	.256	3.4	.571
Apparel and related products	7.3	.285	9.8	.306	0.3	.622
Lumber and products, except furniture	22.5	.254	0.5‡	.409‡	----	----
Furniture and fixtures	5.7	.311	1.1	.416	----	----
Paper and allied products	198.6	.273	464.8	.234	5.8	.221
Printing and publishing industries§	5.8	.327	2.4	.430	0.2	.340
Chemicals and allied products	651.3	.282	534.1	.220	9.0	.571
Petroleum and coal products	75.0	.314	1.0	.248	4.4	.211
Rubber products	87.4	.282	90.9	.231	0.1	.840

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
9.6	\$0.484	----	\$-----	0.1	\$1.000	----	\$-----	1.3	\$ 9.364
203.2	.485	----	-----	45.3	1.359	----	-----	29.2	5.066
1,164.7	.445	----	-----	2,784.6	.801	----	-----	345.8	4.062
523.9	.498	----	-----	724.7	1.252	----	-----	140.3	5.174
559.6	.468	----	-----	591.2	1.287	----	-----	248.9	4.699
174.7	.458	----	-----	196.7	1.351	----	-----	66.1	4.953
269.9	.427	----	-----	119.4	1.243	----	-----	116.2	3.984
67.7	.505	----	-----	73.8	1.373	----	-----	23.2	5.569
340.3	.428	----	-----	331.9	1.217	----	-----	93.6	5.056
12,292.5	.512	3,742.3	.534	149,040.0	.552	3,425.6	.625	11,574.6	2.543
4,403.1	.531	795.9	.483	138,680.6	.356	1,446.8	.554	5,598.3	1.395
178.8	.620	201.4	.591	1,190.7	.832	256.8	.695	280.9	4.115
212.5	.546	511.0	.518	66.1	1.515	1,284.7	.662	254.4	3.314
128.3	.593	37.7	.434	1,293.1	.804	33.0	.796	332.1	2.860
81.9	.567	17.4	.596	16.7	1.378	47.0	.775	129.0	3.398
510.5	.497	-----	-----	568.5	1.021	-----	-----	414.3	2.716
4,633.9	.479	28.8	.798	6,830.8	1.215	41.6	.809	1,892.1	6.280
2,143.5	.529	2,150.1	.550	393.5	1.398	315.7	.680	2,670.5	1.955
1,811.7	.477	286.4	.590	2,229.7	1.096	540.3	.634	752.3	3.928
1.2	.676	-----	-----	4.9	1.423	-----	-----	1.6	9.582
551.6	.450	28.1	.481	219.2	1.471	10.7	.608	303.9	4.014
129.3	.665	5.1	.519	534.0	1.700	30.0	.754	261.2	10.082
49.2	.586	8.5‡	.831	4.3‡	1.870	2.6‡	.667	36.8	5.689
59.4	.582	14.4	.510	105.7	1.217	113.6	.472	90.6	4.933
322.3	.479	22.4	.570	174.1	1.167	-----	-----	965.4	2.314
116.0	.550	44.4	.629	673.4	1.388	12.1	.845	243.0	6.272
1,119.0	.467	51.2	.586	331.5	1.288	109.2	.519	1,732.2	1.617
135.4	.550	15.2	.450	588.7	.510	0.1	1.000	131.8	2.469
32.9	.500	23.3	.580	12.8	1.362	3.3	.667	107.5	2.396
70.8	.455	2.7	.607	56.6	1.520	0.2	1.000	83.8	5.372
1,498.8	.508	1,443.9	.554	434.9	1.140	100.8	.554	610.0	2.308
4,428.6	.531	632.8	.460	138,776.9	.369	1,287.2	.600	4,212.4	1.318
542.7	.545	281.1	.495	1,203.6	1.114	230.1	.685	285.8	4.902
326.5	.558	416.1	.564	513.3	1.207	442.9	.729	403.5	3.779
318.6	.563	143.8	.546	966.0	.952	83.9	.652	598.4	2.351
568.4	.495	294.6	.494	541.2	.847	367.4	.630	384.6	3.168
68.7	.490	19.1	.632	1,096.1	.792	82.8	.521	171.9	4.286
141.4	.576	9.2	.649	573.3	1.284	8.4	.803	194.9	5.683
15,484.1	.422	-----	-----	7,870.8	1.184	-----	-----	3,361.0	3.821
91.1	.570	-----	-----	20.2	1.431	-----	-----	61.6	3.900
11,559.2	.422	-----	-----	6,335.4	1.189	-----	-----	2,307.6	4.037
503.0	.464	-----	-----	781.1	1.140	-----	-----	201.9	3.756
1,442.1	.392	-----	-----	262.6	1.234	-----	-----	326.9	3.439
26.5	.589	-----	-----	26.1	1.794	-----	-----	9.1	6.563
550.2	.389	-----	-----	6.0	1.906	-----	-----	239.8	2.292
1,312.0	.444	-----	-----	439.4	1.107	-----	-----	214.1	3.715
1,176.8	.428	-----	-----	979.8	1.154	-----	-----	249.9	4.171
11.6	.452	-----	-----	5.4	1.483	-----	-----	7.4	5.668
2,456.5	.441	-----	-----	546.1	1.257	-----	-----	186.1	5.157
133.7	.591	-----	-----	73.5	1.662	-----	-----	38.7	9.585
10.2	.589	-----	-----	2.4‡	1.846	-----	-----	8.9	8.053
37.6	.524	-----	-----	63.3	1.477	-----	-----	12.8	6.238
860.4	.410	-----	-----	46.2	1.245	-----	-----	252.9	3.398
76.8	.451	-----	-----	161.3	1.400	-----	-----	37.8	6.267
3,381.4	.393	-----	-----	349.1	1.312	-----	-----	779.2	2.976
834.6	.382	-----	-----	56.2	1.287	-----	-----	59.4	3.476
93.4	.431	-----	-----	66.4	1.201	-----	-----	157.2	3.359

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
MIDDLE ATLANTIC—continued						
NEW JERSEY—continued						
Leather and leather products	28.4	\$0.322	1.8	\$0.368	-----	\$-----
Stone, clay, and glass products	214.2	.283	46.1	.273	39.8	.599
Primary metal industries	309.5	.283	91.9	.287	117.5	.633
Fabricated metal products	79.0	.287	7.8	.331	35.3	.588
Machinery (except electrical)	87.0	.297	59.8	.260	16.5	.656
Electrical machinery	63.8	.313	87.4	.245	0.1	.680
Transportation equipment	98.5	.289	11.8	.266	4.7	.716
Instruments and related products	1.9	.275	2.4	.421	-----	-----
Miscellaneous manufactures	66.2	.314	8.3	.298	0.4	.838
PENNSYLVANIA	16,065.4	.214	2,423.4	.208	19,028.2	.391
Metropolitan Area A	518.4	.230	9.3	.251	202.3	.519
Metropolitan Area B	213.0	.200	0.3	.316	848.6	.516
Metropolitan Area C	13.8	.217	97.0	.228	0.7	.632
Metropolitan Area D	6,245.2	.181	89.2	.278	13,157.5	.366
Metropolitan Area E	113.1	.180	0.6	.270	1,659.1	.389
Metropolitan Area F	332.2	.226	0.5	.307	4.5	.461
Metropolitan Area G	28.2	.220	150.4	.219	1.0	.702
Metropolitan Area H	263.4	.268	83.6	.128	745.9	.392
Metropolitan Area J	323.4	.266	37.2	.228	11.2	.679
Metropolitan Area K	150.7	.262	120.1	.240	16.8	.645
Metropolitan Area L	213.1	.263	98.1	.238	122.7	.607
Metropolitan Area M	1,322.4	.253	284.4	.222	1,547.0	.451
Metropolitan Area N	2,248.8	.277	278.6	.279	411.5	.406
All other counties	4,079.7	.204	1,174.1	.178	299.4	.585
Industry Groups						
Food and kindred products	905.6	.236	221.8	.248	3.8	.534
Tobacco manufactures	6.6	.326	12.4	.263	-----	-----
Textile mill products	531.8	.295	314.3	.202	0.2	.360
Apparel and related products	43.0	.283	40.2	.278	0.1	.720
Lumber and products, except furniture	40.5	.239	2.5‡	.313‡	-----‡	-----‡
Furniture and fixtures	76.2	.249	9.0	.268	0.4	.657
Paper and allied products	1,523.1	.217	126.4	.210	2.3	.468
Printing and publishing industries§	18.7	.246	45.5	.250	-----	-----
Chemicals and allied products	1,279.4	.230	470.8	.166	7.6	.355
Petroleum and coal products	588.5	.183	97.5	.170	0.4	.545
Rubber products	139.0	.211	10.8	.186	-----	-----
Leather and leather products	175.3	.243	40.9	.193	0.6	.510
Stone, clay, and glass products	3,890.6	.224	130.5	.230	33.6	.450
Primary metal industries	5,257.3	.188	657.6	.207	18,796.2	.388
Fabricated metal products	285.3	.254	55.7	.253	62.0	.623
Machinery (except electrical)	406.4	.231	37.8	.315	81.6	.648
Electrical machinery	539.1	.194	34.0	.202	6.1	.674
Transportation equipment	276.9	.219	50.3	.203	30.4	.613
Instruments and related products	24.2	.268	0.8	.369	0.8	.616
Miscellaneous manufactures	57.9	.253	64.6	.254	2.1	.478
EAST NORTH CENTRAL						
OHIO	14,307.1	.209	232.1	.253	12,703.9	.419
Metropolitan Area A	376.9	.239	6.5	.299	514.4	.522
Metropolitan Area B	391.8	.243	39.5	.259	14.1	.567
Metropolitan Area C	559.8	.246	4.4	.375	29.8	.738
Metropolitan Area D	573.8	.262	2.8	.219	532.0	.295
Metropolitan Area E	1,883.9	.224	72.2	.236	2,515.5	.451
Metropolitan Area F	2,075.3	.178	16.0	.209	78.2	.492
Metropolitan Area G	683.1	.184	1.2	.233	435.9	.395
Metropolitan Area H	1,529.2	.186	3.9	.285	5,445.4	.412
Metropolitan Area J	433.2	.155	8.0	.219	632.3	.272
Metropolitan Area K	883.3	.249	41.4	.263	27.1	.594
Metropolitan Area L	354.4	.178	-----	-----	269.6	.459
All other counties	4,562.4	.212	36.2	.270	2,209.6	.438

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
55.2	\$0.428	----	\$----	24.2	\$1.511	----	\$----	16.0	\$6.947
1,965.4	.442	----	----	870.4	1.123	----	----	189.6	3.807
2,355.2	.409	----	----	1,488.0	1.144	----	----	397.9	3.229
311.8	.523	----	----	966.8	1.166	----	----	138.8	4.870
346.7	.486	----	----	460.0	1.287	----	----	201.1	4.602
435.7	.428	----	----	1,025.5	1.103	----	----	266.9	3.670
445.9	.418	----	----	267.7	1.056	----	----	206.0	3.358
144.8	.391	----	----	86.1	1.284	----	----	54.7	4.031
350.4	.426	----	----	332.4	1.264	----	----	99.7	5.170
19,705.0	.509	71,534.9	.331	347,497.4	.343	503,772.6	.306	9,386.0	2.938
365.5	.599	99.0	.480	3,100.2	.359	390.8	.564	280.2	3.244
886.9	.562	464.8	.420	-----	-----	30,721.3	.208	159.5	2.697
6.1	.627	19.9	.426	74.2	1.274	10.2	.753	79.3	3.770
3,930.5	.584	51,290.0	.328	81,477.9	.399	470,946.0	.306	3,486.5	2.363
854.1	.573	330.2	.407	128,842.1	.142	4.9	.636	38.9	4.168
41.7	.390	234.3	.386	2.3	.750	-----	-----	32.2	4.092
33.7	.561	17.5	.592	28.4	1.634	17.8	.683	129.0	3.670
1,029.7	.457	4.8	.560	39,841.1	.279	138.1	.321	108.1	3.935
228.5	.491	55.9	.470	139.1	1.073	112.8	.631	179.9	4.009
132.7	.549	16.6	.454	89.4	1.391	26.4	.527	177.8	3.393
408.5	.496	47.9	.346	327.2	.972	15.5	.596	257.7	3.697
2,117.8	.453	33.2	.444	85,496.5	.328	7.5	.632	630.9	3.053
7,694.8	.462	369.5	.421	7,813.3	.814	550.2	.572	2,485.9	3.158
1,974.5	.567	18,551.3	.330	265.7	1.143	831.1	.333	1,340.1	3.326
940.5	.458	1,159.5	.391	1,141.1	1.074	231.1	.565	470.1	4.003
34.1	.455	4.1	.512	1.8	1.300	0.8	.714	18.5	4.734
1,043.3	.455	58.4	.401	96.0	1.156	18.1	.646	539.8	3.847
90.6	.536	66.4	.425	100.0	1.269	21.4	.649	79.0	7.308
58.1	.597	16.5‡	.457‡	5.0‡	1.259‡	2.2‡	.750‡	22.4	6.920
42.2	.516	86.7	.392	90.3	1.250	16.2	.701	37.2	5.933
718.6	.439	32.4	.374	47.0	1.205	5.4	.673	374.1	2.855
58.9	.496	170.2	.425	414.7	1.158	52.4	.585	113.8	4.719
1,536.4	.467	1,681.0	.335	2,432.6	.428	152.0	.478	437.9	2.823
387.5	.507	672.4	.379	29,088.2	.197	4,710.7	.164	602.1	2.293
132.6	.422	16.5	.445	3.6	1.579	7.8	.592	208.7	2.764
43.3	.476	61.3	.380	11.8	1.047	1.5	.500	39.1	5.452
879.9	.500	23,062.9	.331	7,791.9	.396	1,313.4	.332	976.4	2.704
11,877.9	.528	34,998.4	.321	303,126.8	.304	495,767.6	.301	3,657.6	2.367
534.4	.517	3,949.4	.350	1,386.9	1.005	472.4	.580	506.2	3.593
640.2	.512	2,825.3	.334	698.6	.997	520.4	.507	519.2	3.735
183.1	.507	1,713.8	.375	191.9	1.153	255.2	.492	367.0	3.155
359.5	.541	851.5	.349	709.4	.452	147.0	.447	276.5	3.124
33.3	.565	29.9	.465	84.7	1.007	22.2	.612	35.8	3.984
110.6	.471	78.3	.464	75.1	1.229	54.8	.654	104.6	3.320
15,017.5	.542	60,827.9	.384	100,795.4	.287	449,898.3	.285	8,982.3	2.951
230.9	.523	1,057.1	.410	21,805.1	.334	1,617.3	.346	424.4	3.969
94.7	.567	3,529.3	.382	-----	-----	-----	-----	253.6	3.353
56.3	.568	5,259.2	.422	-----	-----	-----	-----	460.1	3.508
875.3	.479	2,380.2	.431	14,426.9	.151	158.4	.635	311.9	2.579
3,110.5	.521	8,919.2	.440	642.3	.518	112,820.6	.269	1,662.1	3.141
144.6	.591	1,577.6	.433	-----	-----	-----	-----	618.9	2.760
1,253.3	.571	5,667.8	.378	355.0	.318	7,676.1	.295	969.2	2.268
5,592.5	.565	6,942.1	.382	32,730.2	.154	187,978.5	.266	1,246.8	2.544
819.7	.536	1,876.4	.359	25,839.9	.316	-----	-----	279.6	1.824
432.4	.477	0.1	1.000	-----	-----	2,892.3	.532	475.5	3.702
38.4	.460	487.0	.263	4,832.2	.475	325.0	.166	36.8	3.086
2,368.9	.538	23,131.9	.353	163.8	1.597	136,430.1	.289	2,243.4	3.065

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
EAST NORTH CENTRAL—continued						
OHIO—continued						
Industry Groups						
Food and kindred products	734.7	\$0.242	14.2	\$0.281	5.1	\$0.579
Tobacco manufactures	7.7	.284	----	----	----	----
Textile mill products	144.4	.218	6.5	.237	----	----
Apparel and related products	20.1	.276	2.6	.282	0.1	.680
Lumber and products, except furniture	45.9	.234	0.6‡	.322‡	----	----
Furniture and fixtures	97.5	.229	1.7	.317	0.2	.900
Paper and allied products	1,428.4	.217	27.6	.259	0.2	.320
Printing and publishing industries§	56.3	.268	4.4	.277	0.4	.455
Chemicals and allied products	2,185.5	.208	43.9	.256	423.9	.464
Petroleum and coal products	263.8	.200	17.6	.253	----	----
Rubber products	1,520.7	.173	8.9	.223	1.3	.422
Leather and leather products	61.2	.232	1.3	.361	----	----
Stone, clay, and glass products	3,031.1	.210	9.2	.203	20.6	.654
Primary metal industries	2,844.7	.204	58.5	.235	12,113.3	.415
Fabricated metal products	427.0	.210	11.6	.273	40.0	.637
Machinery (except electrical)	697.1	.223	12.9	.235	70.4	.634
Electrical machinery	209.9	.240	1.5	.281	21.8	.581
Transportation equipment	377.1	.226	1.0	.366	3.3	.539
Instruments and related products	11.9	.234	1.7	.419	----	----
Miscellaneous manufactures	142.1	.218	6.4	.288	3.3	.627
INDIANA	5,792.6	.200	75.6	.241	6,388.6	.524
Metropolitan Area A	1,576.2	.209	8.8	.342	6,143.4	.520
Metropolitan Area B	321.8	.218	1.7	.282	12.4	.746
Metropolitan Area C	169.2	.235	0.8	.138	1.8	.682
Metropolitan Area D	568.3	.199	12.0	.271	50.2	.617
Metropolitan Area E	244.3	.146	0.7	.292	4.2	.570
Metropolitan Area F	216.9	.177	1.9	.290	1.0	.577
All other counties	2,695.9	.198	49.7	.213	175.6	.636
Industry Groups						
Food and kindred products	823.7	.202	7.0	.254	4.2	.237
Tobacco manufactures	4.4	.176	----	----	----	----
Textile mill products	49.6	.223	11.0	.146	----	----
Apparel and related products	24.3	.274	1.3	.136	0.1	.640
Lumber and products, except furniture	49.7	.185	----	----	----	----
Furniture and fixtures	123.9	.209	3.7	.243	0.2	.320
Paper and allied products	442.5	.178	2.6	.229	----	----
Printing and publishing industries§	15.5	.280	0.4	.343	0.2	.400
Chemicals and allied products	376.3	.170	14.1	.317	12.5	.316
Petroleum and coal products	478.6	.197	----	----	2.6	.084
Rubber products	134.1	.206	----	----	----	----
Leather and leather products	16.1	.179	----	----	----	----
Stone, clay, and glass products	1,186.9	.188	16.7	.225	74.7	.622
Primary metal industries	902.6	.230	0.7	.315	6,237.5	.523
Fabricated metal products	161.2	.204	4.6	.226	9.8	.646
Machinery (except electrical)	287.6	.207	3.8	.262	40.4	.589
Electrical machinery	145.6	.198	0.3	.303	3.8	.722
Transportation equipment	525.8	.200	0.9	.349	2.4	.660
Instruments and related products	1.6	.251	----	----	----	----
Miscellaneous manufactures	42.6	.255	8.5	.251	0.2	.400
ILLINOIS	10,338.5	.183	269.8	.273	5,700.3	.553
Metropolitan Area A	163.4	.178	2.0	.222	28.8	.736
Metropolitan Area B	192.6	.213	2.0	.291	22.3	.689
Metropolitan Area C	4,432.9	.213	134.5	.265	5,084.4	.549
Metropolitan Area D	1,269.0	.140	1.1	.258	22.8	.703
Metropolitan Area E	56.6	.158	1.5	.168	0.7	.632
Metropolitan Area F	1,670.1	.149	11.3	.203	450.3	.577
All other counties	2,553.9	.174	117.4	.290	91.0	.532
Industry Groups						
Food and kindred products	2,881.9	.176	28.1	.261	39.5	.411
Tobacco manufactures	5.5	.220	----	----	----	----
Textile mill products	86.3	.226	5.0	.240	0.2	.420

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
217.0	\$0.545	2,203.6	\$0.463	115.1	\$0.641	574.1	\$0.521	333.0	\$4.312
0.3	.737	4.2	.523	----	----	0.3	.667	3.2	5.752
13.8	.520	49.8	.484	----	----	-----	-----	60.6	2.984
10.2	.578	129.5	.494	12.5	.647	19.2	.580	22.9	6.205
6.6	.589	14.6‡	.523‡	-----	-----	21.9‡	.518‡	17.5	6.819
17.5	.664	616.3	.411	0.2	2.000	32.4	.554	67.2	4.275
93.9	.509	69.7	.481	13.1	1.606	84.1	.545	181.4	3.658
27.2	.544	539.5	.448	12.7	.696	100.0	.527	88.7	5.336
830.2	.495	1,248.0	.422	296.1	.542	238.7	.554	465.0	2.870
160.5	.477	60.3	.441	55,072.5	.187	1,112.9	.275	249.3	2.665
18.0	.539	220.9	.442	12.7	.986	0.6	.600	597.0	2.666
7.7	.595	20.7	.502	1.3	2.000	4.9	.477	18.0	5.295
501.1	.577	18,543.2	.320	2,966.9	.479	3,815.0	.399	503.3	3.164
11,898.2	.542	20,244.7	.389	41,746.3	.331	442,150.3	.272	3,794.2	2.260
435.1	.570	4,325.4	.450	209.9	.597	477.0	.542	553.6	4.087
467.5	.557	8,310.1	.423	74.0	.530	603.8	.495	903.7	3.686
30.6	.662	1,885.4	.411	26.1	.972	65.1	.502	454.2	3.134
194.2	.628	1,861.9	.434	234.4	.507	366.7	.488	545.1	3.277
5.1	.867	72.3	.487	----	----	5.8	.566	12.6	5.472
82.8	.528	407.8	.476	1.6	1.444	225.5	.503	111.8	4.168
10,330.3	.448	17,565.0	.308	304,388.9	.373	7,875.7	.418	3,435.1	3.127
8,113.5	.424	2,467.9	.285	300,997.2	.352	5,196.8	.384	1,164.9	2.276
81.7	.522	5.2	.600	369.5	1.107	460.7	.607	156.0	3.162
103.8	.561	1,067.7	.490	150.7	.990	141.9	.672	222.7	3.328
489.0	.550	297.8	.328	1,844.0	.702	37.7	.637	525.2	3.482
17.8	.670	756.6	.400	2.4	1.231	70.0	.787	127.9	3.390
53.5	.498	16.2	.329	11.0	1.017	4.6	.690	28.0	4.213
1,471.0	.532	12,953.6	.292	1,014.1	.886	1,964.0	.427	1,210.4	3.697
478.7	.506	551.8	.357	317.5	.867	132.1	.597	231.2	4.259
-----	-----	4.1	.535	----	----	-----	-----	1.5	4.804
16.5	.541	1.4	.533	4.5	1.625	7.0	.778	20.9	4.024
11.5	.588	17.5	.332	4.1	1.091	6.0	.667	10.8	6.333
13.0	.527	20.8‡	.427‡	0.7‡	1.750‡	1.0‡	1.000‡	23.3	5.429
10.8	.558	121.7	.465	72.2	.838	16.9	.667	53.3	5.102
34.5	.537	40.0	.410	5.2	1.107	1.7	.867	68.5	3.409
15.4	.511	85.2	.344	36.7	1.106	58.6	.677	25.0	6.322
488.3	.477	314.7	.410	53.2	1.157	205.7	.416	267.5	2.587
321.4	.531	1,325.8	.198	4,712.0	.303	327.2	.183	167.9	2.335
14.0	.582	1.8	.579	11.8	.984	0.5	1.400	126.4	2.907
1.0	.581	4.0	.405	1.2	1.167	----	----	2.6	6.483
375.1	.548	8,476.8	.243	136.4	.977	745.5	.312	329.4	2.722
7,896.0	.426	2,673.7	.400	296,492.7	.354	4,976.2	.382	995.0	2.602
170.5	.552	1,015.8	.390	1,000.0	.699	147.5	.673	165.2	3.856
184.5	.589	912.6	.409	464.9	.967	389.0	.680	319.9	3.709
16.8	.541	538.2	.420	83.1	.784	72.0	.697	252.3	2.995
264.7	.489	1,426.7	.395	945.6	.785	726.2	.566	342.2	3.276
7.7	.509	0.8	.750	15.3	1.012	0.1	-----	4.4	5.000
9.9	.599	31.6	.449	31.8	1.128	62.5	.707	27.8	4.713
12,774.2	.476	42,245.9	.219	43,419.5	.499	212,272.1	.306	5,668.4	3.374
59.0	.518	1,507.5	.345	7.0	1.158	275.4	.439	96.0	3.375
143.2	.525	602.8	.548	120.3	1.355	70.8	.740	129.5	4.253
10,138.9	.480	10,264.2	.238	35,221.0	.494	209,973.4	.299	3,693.6	3.472
221.4	.431	2,752.6	.221	1.1	1.667	35.0	.625	256.3	2.831
45.5	.532	140.6	.545	11.6	1.063	17.7	.640	61.4	3.062
993.7	.380	19,155.4	.582	7,285.5	.334	363.3	.520	594.8	2.536
1,172.5	.524	7,822.8	.251	773.0	.755	1,536.5	.356	836.8	3.591
955.5	.507	2,317.6	.264	298.5	1.042	1,428.1	.487	743.7	3.576
0.1	.500	0.2	.500	----	----	----	----	0.8	6.000
68.0	.433	22.5	.339	21.2	1.465	8.3	.733	36.1	4.186

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
EAST NORTH CENTRAL—continued						
ILLINOIS—continued						
Apparel and related products	38.3	\$0.275	2.4	\$0.321	1.6	\$0.244
Lumber and products, except furniture	69.7	.189	0.3‡	.487‡	----‡	----‡
Furniture and fixtures	153.5	.225	2.1	.311	0.2	.500
Paper and allied products	733.6	.178	1.5	.320	----	----
Printing and publishing industries§	60.0	.281	3.0	.356	0.4	.414
Chemicals and allied products	1,458.1	.168	57.8	.346	37.2	.342
Petroleum and coal products	558.6	.166	0.2	.353	0.1	.800
Rubber products	41.1	.194	0.1	.760	----	----
Leather and leather products	108.5	.221	0.7	.270	----	----
Stone, clay, and glass products	1,103.7	.181	35.7	.237	23.3	.375
Primary metal industries	1,233.2	.182	103.4	.243	5,443.3	.554
Fabricated metal products	293.9	.217	8.7	.279	25.7	.610
Machinery (except electrical)	862.2	.195	9.9	.274	123.5	.665
Electrical machinery	327.9	.205	5.1	.258	1.8	.574
Transportation equipment	181.1	.198	3.7	.196	2.5	.616
Instruments and related products	57.4	.213	0.1	1.040	0.1	.200
Miscellaneous manufactures	84.0	.242	2.0	.321	0.9	.686
MICHIGAN	9,082.6	.269	146.2	.344	2,292.8	.497
Metropolitan Area A	104.1	.292	3.4	.490	121.6	.791
Metropolitan Area B	226.3	.302	7.4	.328	7.9	.558
Metropolitan Area C	142.6	.248	60.6	.327	68.0	.706
Metropolitan Area D**						
Metropolitan Area E	135.7	.270	3.3	.601	7.1	.693
Metropolitan Area F	4,219.4	.255	37.0	.370	1,875.4	.452
Metropolitan Area G	539.5	.300	1.5	.168	7.2	.643
All other counties	3,715.0	.279	33.0	.319	205.6	.641
Industry Groups						
Food and kindred products	464.7	.306	17.6	.343	12.1	.520
Tobacco manufactures	4.0	.196	0.2	.549	----	----
Textile mill products	39.5	.262	0.2	.471	4.6	.154
Apparel and related products	5.9	.466	0.8	.291	----	----
Lumber and products, except furniture	50.6	.297	0.1‡	.560‡	----‡	----‡
Furniture and fixtures	108.8	.297	8.5	.313	0.5	.669
Paper and allied products	1,622.7	.238	61.3	.325	0.1	.120
Printing and publishing industries§	13.6	.344	1.7	.243	0.2	.680
Chemicals and allied products	2,155.5	.272	15.4	.335	247.5	.500
Petroleum and coal products	4.1	.290	0.6	.375	32.8	.106
Rubber products	270.6	.275	0.3	.263	----	----
Leather and leather products	50.6	.317	0.1	.360	----	----
Stone, clay, and glass products	832.9	.250	1.5	.370	22.5	.605
Primary metal industries	451.9	.252	7.0	.574	1,645.6	.515
Fabricated metal products	262.8	.238	5.7	.308	22.3	.643
Machinery (except electrical)	356.8	.277	14.7	.309	37.0	.600
Electrical machinery	17.3	.331	0.8	.207	0.3	.500
Transportation equipment	2,324.8	.246	8.5	.452	267.1	.396
Instruments and related products	4.9	.355	0.5	.402	----	----
Miscellaneous manufactures	40.6	.326	0.7	.371	0.2	.520
WISCONSIN	4,077.7	.305	85.8	.380	193.0	.672
Metropolitan Area A	28.2	.329	2.2	.299	0.4	.556
Metropolitan Area B	87.5	.282	0.5	.409	2.9	.609
Metropolitan Area C	1,030.5	.295	18.7	.392	83.3	.666
All other counties	2,931.5	.310	64.4	.379	106.4	.678
Industry Groups						
Food and kindred products	1,058.4	.312	41.5	.390	7.1	.546
Textile mill products	53.5	.329	0.5	.236	0.1	.280
Apparel and related products	10.0	.300	0.9	.288	----	----
Lumber and products, except furniture	48.6	.321	0.7‡	.275‡	----‡	----‡
Furniture and fixtures	92.0	.252	1.4	.382	----	----
Paper and allied products	1,418.3	.315	22.7	.406	2.7	.230
Printing and publishing industries§	15.4	.330	1.3	.312	----	----
Chemicals and allied products	123.0	.307	1.0	.311	----	----

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
35.2	\$0.557	31.5	\$0.447	19.7	\$1.377	109.2	\$0.608	40.5	\$7.876
25.9	.542	9.2‡	.443‡	----‡	----‡	8.0‡	.685‡	23.2	6.937
74.9	.517	72.0	.406	73.6	1.451	141.8	.582	57.1	5.939
301.7	.453	892.0	.178	35.9	.603	61.8	.574	108.7	4.312
179.3	.494	308.4	.295	103.1	1.390	596.5	.487	194.6	4.777
741.1	.477	3,023.8	.223	46.5	1.175	824.7	.414	370.4	3.335
417.3	.436	1,632.8	.116	22,050.7	.272	88.6	.362	211.5	2.634
36.9	.493	29.6	.267	1.5	1.500	16.2	.599	53.4	2.791
20.7	.493	3.6	.605	10.3	.571	4.4	.775	45.0	4.754
971.8	.496	12,435.5	.212	383.8	.500	1,512.4	.311	260.2	3.016
6,627.6	.457	15,674.1	.177	19,021.9	.511	202,115.7	.250	1,720.2	2.403
719.1	.523	1,988.8	.366	967.8	.812	1,844.0	.551	384.3	4.700
828.0	.522	2,920.8	.336	125.1	1.271	2,316.1	.462	836.8	3.403
288.5	.515	315.7	.404	184.6	1.227	656.1	.485	264.2	3.988
233.1	.492	249.8	.448	33.1	1.190	292.6	.448	180.3	3.414
91.4	.497	124.8	.232	10.7	1.293	113.1	.596	59.3	4.224
158.1	.535	193.2	.356	31.5	1.359	134.5	.630	78.1	5.725
9,405.4	.524	21,165.3	.423	70,267.5	.478	60,745.5	.257	6,113.7	3.325
43.9	.496	1,688.1	.332	----	----	----	----	158.5	3.440
362.8	.550	766.8	.427	25.7	1.338	51.0	.736	161.4	4.599
33.5	.547	1,527.2	.394	17.4	1.000	175.7	.443	147.5	3.341
284.2	.550	792.9	.354	4.3	1.565	8.1	.699	165.8	3.173
5,542.9	.534	9,849.7	.472	69,323.5	.448	60,359.2	.253	3,568.1	3.291
67.8	.624	253.3	.656	6.3	1.382	14.9	.822	105.5	4.015
3,070.3	.499	6,287.3	.376	890.3	1.088	136.6	.722	1,806.9	3.241
600.4	.556	1,148.4	.501	105.4	1.272	143.5	.565	225.1	4.485
----	----	0.8	.625	0.2	1.000	0.1	----	0.6	7.300
31.5	.556	13.3	.514	1.8	1.500	1.0	.889	34.2	3.950
15.7	.551	20.2	.420	4.0	1.364	2.0	.722	6.8	6.823
41.1	.666	16.7‡	.657‡	0.8‡	1.500‡	0.2‡	.500‡	50.2	4.437
25.5	.639	80.6	.489	47.5	1.188	25.0	.784	37.9	5.875
66.3	.581	26.3	.580	5.4	1.414	6.1	.800	202.5	3.406
16.9	.644	124.7	.558	25.5	1.377	22.0	.635	38.8	6.397
1,673.7	.470	4,028.9	.303	1,265.4	.597	3,010.3	.265	690.0	2.196
34.1	.512	144.4	.176	63,049.7	.363	2.0	.667	81.3	3.056
18.0	.517	18.7	.679	3.6	1.263	6.0	.593	180.1	3.060
51.3	.641	6.1	.562	1.2	1.500	----	----	10.1	3.977
365.2	.547	233.1	.497	1,345.8	.472	20.9	.711	97.1	4.058
3,951.8	.514	5,116.2	.430	2,815.2	.581	25,482.6	.245	1,506.3	3.010
457.8	.559	1,300.2	.578	200.7	1.289	824.4	.492	395.6	4.390
525.0	.555	1,607.5	.476	328.8	1.132	241.2	.721	484.3	4.329
71.8	.552	134.5	.569	70.2	1.224	20.9	.726	39.8	5.293
1,430.9	.555	7,060.6	.424	969.7	.934	30,924.2	.243	1,996.0	3.120
7.3	.547	28.3	.677	7.1	1.342	2.3	.667	9.0	4.909
21.1	.665	55.8	.592	19.5	1.486	10.8	.847	28.0	5.427
2,705.2	.544	8.5	.708	4,857.7	.965	----	----	2,101.5	3.587
2.8	.672	----	----	11.4	1.097	----	----	16.0	3.665
38.6	.617	----	----	104.9	1.124	----	----	28.4	4.236
1,329.8	.527	----	----	2,015.4	.970	----	----	805.4	3.714
1,334.0	.559	8.5	.708	2,726.0	.954	----	----	1,251.7	3.489
741.6	.498	0.3	1.333	381.2	1.106	----	----	278.8	4.453
16.6	.600	----	----	4.8	1.192	----	----	21.0	4.736
5.9	.708	----	----	22.8	1.154	----	----	7.7	6.319
32.7	.597	----	----	2.7‡	1.400‡	----	----	36.3	5.147
27.1	.584	----	----	36.8	1.206	----	----	17.1	5.432
62.8	.567	----	----	20.0	1.111	----	----	520.4	2.463
11.8	.663	----	----	151.3	1.113	----	----	30.8	6.092
42.4	.536	----	----	68.0	1.022	----	----	30.7	4.928

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
EAST NORTH CENTRAL—continued						
WISCONSIN—continued						
Petroleum and coal products	19.8	\$0.312	1.7	\$0.241	----	\$ ----
Leather and leather products	109.0	.330	0.6	.362	----	----
Stone, clay, and glass products	116.3	.285	1.6	.367	13.7	.711
Primary metal industries	153.7	.320	1.0	.492	94.3	.698
Fabricated metal products	140.9	.295	3.1	.424	22.7	.623
Machinery (except electrical)	355.7	.295	6.1	.297	37.4	.688
Electrical machinery	81.1	.269	0.9	.284	2.5	.603
Transportation equipment	169.1	.236	0.5	.362	11.7	.642
Instruments and related products	12.1	.307	----	----	----	----
Miscellaneous manufactures	25.6	.340	0.2	.569	0.8	.758
WEST NORTH CENTRAL						
MINNESOTA	1,194.1	.325	34.5	.296	572.9	.461
Metropolitan Area A	192.1	.283	0.4	.373	490.7	.429
Metropolitan Area B	294.5	.361	8.6	.373	50.8	.645
All other counties	707.5	.322	25.5	.269	31.4	.662
Industry Groups						
Food and kindred products	366.5	.292	23.0	.271	16.6	.528
Textile mill products	14.9	.309	0.3	.368	----	----
Apparel and related products	2.9	.384	0.2	.275	----	----
Lumber and products, except furniture	18.6	.274	1.2‡	.269‡	----	----
Furniture and fixtures	5.0	.361	----	----	----	----
Paper and allied products	425.4	.373	0.5	.472	----	----
Printing and publishing industries§	13.1	.367	0.5	.512	----	----
Chemicals and allied products	43.8	.348	2.3	.324	3.7	.533
Petroleum and coal products	7.7	.377	1.6	.367	----	----
Leather and leather products	8.1	.267	----	----	----	----
Stone, clay, and glass products	128.8	.254	2.9	.324	19.9	.568
Primary metal industries	82.8	.297	0.7	.444	515.4	.445
Fabricated metal products	13.8	.337	0.5	.307	2.2	.755
Machinery (except electrical)	35.4	.371	0.6	.336	14.8	.721
Electrical machinery	6.1	.369	----	----	----	----
Transportation equipment	6.7	.391	----	----	0.3	.878
Instruments and related products	0.7	.415	0.1	.160	----	----
Miscellaneous manufactures	10.8	.352	0.1	.200	----	----
IOWA	1,778.0	.205	34.1	.253	122.8	.658
Metropolitan Area A	9.2	.307	2.6	.305	0.3	1.122
Metropolitan Area B	1.5	.300	----	----	4.4	.723
Metropolitan Area C	189.7	.205	2.2	.284	3.9	.613
Metropolitan Area D	156.3	.149	0.2	.314	5.4	.780
All other counties	1,421.3	.211	29.1	.246	108.8	.650
Industry Groups						
Food and kindred products	728.0	.202	10.6	.258	1.4	.591
Textile mill products	4.7	.207	----	----	----	----
Apparel and related products	2.4	.281	0.2	.353	----	----
Lumber and products, except furniture	14.7	.222	0.2‡	.353‡	----	----
Furniture and fixtures	5.2	.224	----	----	----	----
Paper and allied products	104.9	.239	0.4	.324	----	----
Printing and publishing industries§	10.1	.200	0.6	.243	----	----
Chemicals and allied products	136.8	.211	2.0	.374	20.2	.572
Rubber products	21.9	.200	----	----	----	----
Leather and leather products	0.7	.268	----	----	0.1	.080
Stone, clay, and glass products	473.7	.207	13.2	.235	0.1	.800
Primary metal industries	96.9	.159	----	----	54.6	.585
Fabricated metal products	7.7	.278	3.0	.163	1.0	.343
Machinery (except electrical)	146.0	.211	3.2	.273	45.0	.795
Electrical machinery	4.0	.227	0.1	.320	----	----
Transportation equipment	8.0	.189	0.1	.640	0.4	.747
Instruments and related products	0.9	.288	----	----	----	----
Miscellaneous manufactures	10.8	.221	0.4	.294	----	----

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
2.9	\$0.567	----	\$-----	0.3	\$1.000	----	\$-----	14.4	\$3.963
10.3	.593	----	----	44.8	1.475	----	----	35.2	5.150
122.8	.596	----	----	355.3	1.138	----	----	33.4	4.151
601.8	.561	1.2	.769	924.8	.884	----	----	276.7	3.445
245.9	.568	6.1	.688	690.1	1.085	----	----	158.8	4.025
498.9	.552	----	----	1,287.4	.883	----	----	311.4	3.851
132.4	.544	----	----	223.6	1.041	----	----	83.8	3.790
130.5	.548	----	----	582.9	.763	----	----	130.3	3.345
2.6	.758	----	----	21.0	1.230	----	----	13.9	3.810
14.7	.546	0.8	.625	39.3	1.217	----	----	12.1	5.676
1,761.8	.517	11,541.4	.187	35,124.6	.361	580.8	.496	1,013.1	3.482
544.4	.524	0.4	.500	34,647.5	.313	3.2	.655	72.0	3.516
725.3	.505	6,746.2	.184	399.9	1.116	557.8	.495	438.8	4.218
492.1	.529	4,794.8	.192	77.2	.959	19.8	.489	502.3	2.835
623.8	.512	8,208.1	.181	192.1	1.065	280.1	.483	280.0	4.235
6.9	.530	122.9	.209	1.6	.556	1.2	.455	6.7	5.515
10.2	.421	2.8	.586	1.5	1.500	14.0	.567	8.6	8.874
40.6	.457	25.1‡	.216‡	----	----	0.8‡	.714‡	11.3	6.399
10.8	.491	6.6	.493	5.5	1.267	----	----	4.4	7.053
10.4	.544	1,422.6	.166	3.8	.905	4.3	.564	321.0	1.608
10.5	.602	35.7	.336	39.7	.930	69.4	.607	24.1	6.698
58.3	.465	21.9	.300	4.2	1.174	16.9	.601	61.0	3.418
24.7	.508	25.9	.235	3,439.2	.241	----	----	14.7	3.849
1.6	.515	0.3	.333	0.3	1.000	0.3	.667	4.2	4.601
39.6	.606	448.1	.195	19.1	.816	4.2	.368	44.9	3.355
565.5	.532	14.1	.358	31,199.9	.321	76.7	.251	40.8	4.198
61.0	.528	129.8	.244	102.0	1.109	40.4	.579	37.1	5.138
98.7	.565	689.8	.248	76.6	1.027	28.5	.616	69.9	4.472
30.2	.580	104.4	.328	11.8	1.250	25.0	.586	35.6	4.087
7.6	.628	276.1	.179	12.8	1.275	2.3	.667	4.7	5.500
0.2	.583	0.1	----	0.5	1.000	4.7	.628	1.0	8.147
160.0	.447	7.1	.333	14.0	1.276	12.0	.651	39.0	3.617
531.5	.521	12,457.3	.199	358.4	1.170	80.8	.495	955.2	3.244
74.0	.444	1,779.7	.170	47.8	1.074	59.9	.460	41.5	3.650
0.4	.760	94.5	.263	----	----	----	----	8.7	4.273
51.1	.434	1,390.0	.184	49.7	.948	----	----	109.0	3.459
36.0	.561	504.2	.326	51.6	1.240	----	----	46.9	3.724
370.0	.544	8,688.9	.199	209.3	1.227	20.9	.595	749.1	3.148
225.5	.512	4,390.7	.198	136.7	1.157	25.3	.406	258.4	3.933
0.2	.833	7.8	.232	----	----	----	----	1.4	5.542
3.7	.651	6.0	.492	5.0	1.259	----	----	2.9	7.848
1.3	.840	3.2‡	.353‡	0.8‡	1.750‡	----	----	8.7	4.943
0.9	.696	3.3	.257	4.6	1.040	7.2	.523	3.9	6.211
4.9	.497	1.3	.571	0.5	1.000	----	----	13.8	2.864
5.9	.576	126.4	.329	25.3	1.343	2.5	.739	15.9	6.319
59.5	.521	406.6	.210	4.9	1.385	0.2	1.000	246.1	2.246
18.7	.367	157.9	.186	12.0	.431	----	----	40.3	2.815
----	----	0.3	.667	0.5	1.333	----	----	0.8	7.037
13.3	.600	6,432.9	.164	0.3	1.500	----	----	56.2	3.899
32.5	.545	123.9	.441	13.6	1.370	----	----	165.8	1.822
18.5	.588	60.9	.443	43.4	1.073	0.7	.833	15.6	5.244
120.3	.515	615.7	.444	61.6	1.375	33.2	.502	98.7	4.443
6.4	.730	29.4	.414	32.7	.904	7.5	.515	9.3	4.495
15.8	.457	31.2	.329	8.5	1.043	----	----	9.4	4.517
0.1	1.000	3.3	.629	0.9	1.600	0.4	.500	1.2	5.317
3.1	.828	56.1	.248	7.1	1.553	3.8	.706	6.7	5.969

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
WEST NORTH CENTRAL—continued						
MISSOURI	1,956.3	\$0.179	41.9	\$0.233	87.8	\$0.667
Metropolitan Area A	214.4	.170	2.3	.291	8.9	.756
Metropolitan Area B	1,081.2	.176	31.4	.229	44.1	.655
All other counties	660.7	.187	8.2	.232	34.8	.660
Industry Groups						
Food and kindred products	554.5	.178	23.4	.179	6.2	.586
Textile mill products	11.0	.204	0.2	.529	0.1	.440
Apparel and related products	13.7	.206	1.4	.298	0.3	.527
Lumber and products, except furniture	17.9	.191	1.7‡	.403‡	----	----
Furniture and fixtures	10.8	.240	1.3	.355	0.1	.320
Paper and allied products	12.9	.196	0.2	.275	----	----
Printing and publishing industries§	5.6	.277	1.7	.250	0.1	.440
Chemicals and allied products	279.6	.171	1.7	.257	1.4	.582
Petroleum and coal products	27.8	.188	----	----	----	----
Rubber products	1.2	.245	----	----	----	----
Leather and leather products	56.8	.187	2.4	.246	0.4	.495
Stone, clay, and glass products	747.9	.176	2.6	.267	12.0	.691
Primary metal industries	13.3	.261	0.3	.434	56.2	.682
Fabricated metal products	25.7	.226	0.8	.369	3.3	.622
Machinery (except electrical)	30.0	.196	1.4	.298	6.1	.684
Electrical machinery	24.8	.182	0.6	.250	----	----
Transportation equipment	77.8	.167	0.3	.316	0.9	.462
Instruments and related products	7.5	.206	0.1	.360	0.4	.596
Miscellaneous manufactures	10.1	.228	1.8	.322	0.3	.500
NEBRASKA	198.9	.216	8.2	.293	12.5	.735
Metropolitan Area A	1.3	.214	0.1	.320	0.6	.758
Metropolitan Area B	41.8	.265	5.4	.298	6.4	.655
All other counties	155.8	.203	2.7	.283	5.5	.826
Industry Groups						
Food and kindred products	155.5	.200	6.7	.271	4.0	.786
Apparel and related products	1.1	.323	----	----	----	----
Lumber and products, except furniture	0.7	.230	----	----	----	----
Furniture and fixtures	2.1	.224	0.1	.400	----	----
Printing and publishing industries§	0.7	.273	0.2	.176	----	----
Chemicals and allied products	11.6	.297	0.4	.294	----	----
Petroleum and coal products	----	----	----	----	----	----
Stone, clay, and glass products	20.6	.269	----	----	----	----
Fabricated metal products	0.8	.267	----	----	----	----
Machinery (except electrical)	1.9	.241	0.5	.276	1.8	.783
Electrical machinery	0.6	.306	----	----	----	----
Transportation equipment	0.2	.327	----	----	0.5	.806
Miscellaneous manufactures	1.9	.233	----	----	----	----
NORTH DAKOTA	101.3	.152	2.4	.382	0.1	1.080
Industry Groups						
Food and kindred products	97.3	.146	2.3	.390	----	----
Printing and publishing industries§	0.7	.355	0.1	.120	----	----
Stone, clay, and glass products	0.9	.280	----	----	----	----
Fabricated metal products	0.4	.448	----	----	----	----
SOUTH DAKOTA	116.6	.199	1.6	.434	0.4	.768
Industry Groups						
Food and kindred products	35.8	.308	0.6	.355	0.4	.737
Lumber and products, except furniture	0.3	.608	----	----	----	----
Printing and publishing industries§	0.3	.671	0.1	.640	----	----
Chemicals and allied products	0.5	.374	0.9	.463	----	----
Stone, clay, and glass products	79.2	.144	----	----	----	----
Machinery (except electrical)	0.4	.486	----	----	----	----
KANSAS	339.9	.169	48.0	.227	22.8	.543
Metropolitan Area A	0.5	.237	0.1	.240	2.4	.795
Metropolitan Area B	62.6	.183	0.8	.350	4.2	.708
All other counties	276.8	.166	47.1	.225	16.2	.462

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
2,012.8	\$0.418	25,687.1	\$0.211	45.0	\$1.831	1,844.9	\$0.548	1,437.7	\$3.492
897.4	.335	6,908.2	.173	----	----	----	----	353.2	3.314
669.3	.473	8,705.7	.245	3.1	1.941	1,840.7	.548	648.8	3.715
446.1	.500	10,073.2	.207	41.9	1.823	4.2	.605	435.7	3.302
289.2	.464	2,014.2	.255	27.7	1.820	249.5	.689	381.1	3.295
8.5	.522	35.7	.373	----	----	4.1	.838	9.6	4.213
32.2	.458	90.2	.352	2.0	2.000	6.9	.841	29.7	6.151
15.5	.570	110.2‡	.202‡	-----‡	-----‡	0.1‡	1.000‡	11.5	5.732
9.0	.539	42.8	.494	----	----	50.8	.677	16.2	5.259
115.8	.351	285.4	.232	-----	-----	17.7	.522	29.4	4.298
14.7	.498	280.4	.275	3.8	1.857	52.9	.740	33.8	5.565
179.9	.378	1,971.1	.203	----	----	367.7	.374	76.0	3.730
67.0	.354	1,603.9	.171	----	----	0.7	.667	12.7	4.058
0.7	.395	0.6	1.167	----	----	0.7	.833	12.0	3.350
7.8	.467	36.5	.345	0.5	1.667	7.6	.667	30.3	5.503
272.5	.492	12,224.2	.204	-----	-----	14.3	.731	315.9	2.610
728.9	.362	4,112.0	.169	4.1	1.409	66.3	.647	157.5	2.880
94.8	.529	1,162.9	.283	2.5	2.214	277.3	.544	73.2	4.421
52.3	.473	452.6	.334	0.9	1.800	136.2	.602	54.4	4.272
12.5	.508	143.4	.331	0.6	2.000	343.1	.481	54.5	3.680
87.7	.437	1,078.8	.223	0.8	1.500	215.0	.574	112.7	3.443
3.1	.479	5.5	.534	1.6	1.889	4.9	.795	4.0	5.324
20.7	.520	33.6	.507	0.5	2.000	29.1	.830	21.0	3.756
304.3	.495	7,059.5	.189	27.7	1.587	190.6	.636	287.6	3.323
11.3	.608	556.1	.217	3.6	1.737	5.0	.578	23.9	3.681
176.9	.502	2,181.8	.191	6.4	1.229	161.4	.646	178.6	2.961
116.1	.473	4,321.6	.185	17.7	1.688	24.2	.584	85.1	3.982
174.1	.512	3,403.5	.191	19.9	1.692	135.5	.610	195.1	3.132
0.6	.703	4.7	.367	0.3	1.500	1.6	.600	0.6	9.800
0.2	.583	-----‡	-----‡	0.3‡	1.000‡	0.1‡	-----‡	0.6	7.800
0.6	.541	-----	-----	----	----	1.1	.600	1.7	5.534
2.9	.622	55.3	.336	1.1	1.500	14.8	.582	6.0	6.727
10.5	.538	877.3	.194	2.5	1.000	1.3	.667	19.4	2.876
26.7	.361	42.8	.223	----	----	0.2	.500	2.7	3.663
56.4	.414	1,766.9	.173	----	----	0.7	.667	22.4	2.520
5.4	.618	27.6	.286	2.1	1.727	1.5	.714	5.1	4.764
2.3	.636	78.1	.313	0.4	1.500	3.7	.676	5.7	5.330
2.4	.926	20.2	.255	0.2	2.000	4.4	.450	4.8	3.866
2.2	.669	58.5	.283	----	----	0.7	.833	3.1	4.396
1.2	.689	3.1	.515	0.7	7.500	3.7	.824	3.1	4.019
19.7	.676	157.0	.285	16.8	.901	----	----	22.1	6.187
11.9	.703	144.2	.279	11.4	.452	----	----	19.7	5.686
0.4	.640	5.2	.345	3.4	1.722	----	----	1.3	10.909
5.9	.642	4.6	.375	1.6	2.000	----	----	0.4	9.357
0.7	.721	----	----	0.1	1.000	----	----	0.4	7.714
65.4	.473	1,079.9	.190	31.0	1.497	----	----	39.7	4.956
53.8	.471	977.3	.185	6.5	1.486	----	----	28.4	4.753
5.4	.496	0.3‡	1.000‡	-----	-----	----	----	3.4	4.931
1.0	.710	16.3	.322	8.6	1.283	----	----	1.6	9.855
----	----	22.6	.253	13.9	1.573	----	----	1.7	5.017
4.6	.382	54.3	.182	----	----	----	----	3.4	2.957
0.5	.742	7.2	.355	1.9	2.000	----	----	1.1	8.289
666.1	.376	45,147.3	.129	----	----	----	----	643.9	3.187
21.9	.348	2,733.0	.124	----	----	----	----	73.1	4.126
413.8	.350	8,174.0	.134	----	----	----	----	182.5	3.138
230.4	.426	34,240.3	.129	----	----	----	----	388.3	3.033

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
WEST NORTH CENTRAL—continued						
KANSAS—continued						
Industry Groups						
Food and kindred products	13.8	\$0.204	1.1	\$0.290	0.1	\$0.240
Apparel and related products	0.1	.423	0.2	.314	----	----
Lumber and products, except furniture	-----	-----	1.3‡	.155‡	-----‡	-----‡
Furniture and fixtures	0.6	.771	0.1	.200	----	----
Paper and allied products	4.7	.180	-----	-----	-----	-----
Printing and publishing industries§	0.2	.365	-----	-----	-----	-----
Chemicals and allied products	236.6	.160	44.8	.227	9.8	.282
Petroleum and coal products	0.3	.152	-----	-----	-----	-----
Stone, clay, and glass products	72.9	.183	-----	-----	-----	-----
Primary metal industries	5.3	.151	-----	-----	9.0	.750
Fabricated metal products	0.7	.240	0.1	.320	0.6	.530
Machinery (except electrical)	3.2	.199	0.3	.224	2.7	.761
Electrical machinery	0.1	.308	-----	-----	-----	-----
Transportation equipment	1.2	.293	0.1	.240	0.6	.758
Miscellaneous manufactures	0.2	.462	-----	-----	-----	-----
SOUTH ATLANTIC						
DELAWARE	279.4	.280	30.1	.263	19.7	.349
Metropolitan Area A	224.6	.279	28.3	.259	19.3	.345
All other counties	54.8	.287	1.8	.324	0.4	.525
Industry Groups						
Food and kindred products	19.6	.298	1.8	.330	-----	-----
Textile mill products	64.6	.277	-----	-----	0.1	.320
Apparel and related products	0.8	.343	-----	-----	-----	-----
Lumber and products, except furniture	2.9	.270	-----	-----	-----	-----
Paper and allied products	6.8	.185	5.0	.286	-----	-----
Printing and publishing industries§	-----	-----	-----	-----	-----	-----
Chemicals and allied products	68.8	.293	19.3	.224	9.2	.073
Leather and leather products	13.1	.351	2.1	.428	-----	-----
Stone, clay, and glass products	4.2	.314	-----	-----	0.3	.595
Primary metal industries	87.2	.265	1.1	.308	8.0	.573
Fabricated metal products	3.9	.286	0.1	.680	-----	-----
Machinery (except electrical)	1.1	.299	0.2	.294	2.1	.664
Transportation equipment	2.8	.275	-----	-----	-----	-----
Miscellaneous manufactures	2.4	.183	0.1	.200	-----	-----
MARYLAND	1,421.4	.250	162.3	.248	2,469.8	.433
Metropolitan Area A	555.3	.280	134.2	.238	2,447.9	.433
Metropolitan Area B	12.9	.254	1.1	.308	-----	-----
All other counties	853.2	.231	27.0	.293	21.9	.475
Industry Groups						
Food and kindred products	164.0	.293	112.7	.210	-----	-----
Textile mill products	42.9	.252	1.0	.315	-----	-----
Apparel and related products	4.9	.301	1.4	.385	0.2	.520
Lumber and products, except furniture	5.7	.260	0.1‡	.440‡	-----	-----
Furniture and fixtures	2.0	.305	-----	-----	-----	-----
Paper and allied products	323.4	.225	0.1	.320	1.1	.476
Printing and publishing industries§	5.1	.380	0.2	.373	0.2	.580
Chemicals and allied products	458.5	.245	3.9	.183	0.3	.784
Petroleum and coal products	0.9	.326	0.2	.333	-----	-----
Rubber products	65.2	.238	0.5	.378	-----	-----
Leather and leather products	10.1	.307	-----	-----	-----	-----
Stone, clay, and glass products	211.6	.248	12.6	.271	18.2	.429
Primary metal industries	34.0	.253	26.2	.370	2,435.0	.432
Fabricated metal products	36.3	.284	0.9	.594	10.4	.677
Machinery (except electrical)	5.3	.292	0.2	.510	3.9	.738
Electrical machinery	12.3	.234	0.4	.402	-----	-----
Transportation equipment	32.1	.279	1.5	.336	0.5	.637
Instruments and related products	0.1	.192	-----	-----	-----	-----
Miscellaneous manufactures	7.0	.317	0.4	.431	-----	-----

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
188.6	\$0.369	9,903.3	\$0.141	----	\$-----	----	----	272.1	\$3.195
0.7	.721	46.6	.192	----	----	----	----	1.3	8.455
0.3	.421	57.6‡	.137‡	----	----	----	----	1.9	5.600
2.3	.406	23.7	.177	----	----	----	----	1.6	5.000
6.7	.629	731.0	.153	----	----	----	----	11.1	3.005
1.4	.460	168.7	.199	----	----	----	----	7.6	6.788
56.4	.355	9,832.6	.111	----	----	----	----	51.2	3.109
31.5	.581	10,959.8	.135	----	----	----	----	137.0	2.369
277.4	.352	11,563.0	.119	----	----	----	----	42.8	3.835
36.9	.361	134.4	.184	----	----	----	----	4.0	5.588
11.5	.447	258.9	.145	----	----	----	----	14.7	4.355
4.0	.387	270.3	.221	----	----	----	----	11.8	6.382
1.6	.495	36.3	.234	----	----	----	----	5.2	3.819
31.7	.384	820.3	.165	----	----	----	----	48.5	3.453
0.3	.421	29.8	.195	----	----	----	----	0.8	8.407
1,807.2	.465	----	----	200.7	.929	----	----	265.0	3.214
1,564.4	.470	----	----	190.9	.914	----	----	226.2	3.130
242.8	.434	----	----	9.8	1.226	----	----	38.8	3.705
66.2	.469	----	----	8.6	1.283	----	----	25.3	4.289
44.6	.448	----	----	5.8	.806	----	----	3.5	5.521
19.2	.510	----	----	1.2	1.500	----	----	5.5	4.750
19.8	.411	----	----	-----¶	-----¶	----	----	1.5	5.196
59.9	.404	----	----	----	----	----	----	41.4	2.515
3.4	.559	----	----	3.8	1.333	----	----	1.8	6.180
783.2	.549	----	----	26.6	1.243	----	----	101.9	2.620
79.6	.408	----	----	3.8	1.524	----	----	5.1	5.011
15.2	.494	----	----	----	----	----	----	0.8	6.667
416.8	.382	----	----	51.9	.750	----	----	30.6	3.076
21.7	.474	----	----	41.7	.902	----	----	12.1	3.944
21.8	.442	----	----	13.9	.973	----	----	7.3	4.193
42.8	.436	----	----	3.5	1.211	----	----	6.8	4.841
85.0	.392	----	----	37.7	.735	----	----	8.0	3.447
5,738.5	.398	336.6	.383	160,463.8	.268	----	----	1,701.5	3.040
5,506.6	.393	----	----	160,353.5	.265	----	----	1,376.1	2.944
48.8	.512	17.8	.455	17.9	1.155	----	----	11.0	4.219
183.1	.540	318.8	.379	92.4	1.164	----	----	314.4	3.417
523.0	.427	34.9	.448	378.8	1.129	----	----	135.6	4.480
11.6	.529	1.4	.533	1.4	1.000	----	----	22.4	4.243
25.4	.592	----	----	66.7	1.122	----	----	28.5	5.287
15.3	.574	-----¶	-----¶	1.0‡	1.600‡	----	----	5.5	6.351
10.6	.542	0.9	.889	1.7	1.556	----	----	5.4	5.935
33.4	.442	18.2	.414	6.0	1.344	----	----	40.2	2.909
13.7	.470	2.5	.500	84.1	1.238	----	----	17.3	6.095
441.0	.386	253.5	.364	553.1	1.020	----	----	273.6	2.903
21.0	.402	----	----	14,244.4	.171	----	----	33.4	2.624
12.2	.595	0.4	.500	0.7	1.500	----	----	80.1	3.054
20.8	.371	----	----	3.3	1.167	----	----	3.2	5.624
475.3	.441	24.7	.417	483.6	.694	----	----	55.1	3.876
3,654.3	.381	----	----	142,930.4	.190	----	----	674.7	2.333
216.6	.442	----	----	1,156.9	.947	----	----	122.6	3.401
34.0	.417	0.1	1.000	106.7	1.054	----	----	32.0	3.918
30.2	.471	----	----	68.8	1.140	----	----	23.5	3.772
192.4	.424	----	----	343.9	1.004	----	----	137.4	2.987
2.7	.467	----	----	4.7	1.240	----	----	2.0	5.044
4.7	.564	----	----	27.6	1.174	----	----	8.9	5.128

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
SOUTH ATLANTIC—continued						
DISTRICT OF COLUMBIA	20.6	\$0.365	2.0	\$0.388	----	\$-----
Industry Groups						
Food and kindred products	7.4	.375	0.5	.472	----	----
Paper and allied products	6.0	.328	----	----	----	----
Printing and publishing industries§	3.2	.381	0.6	.296	----	----
Chemicals and allied products	0.6	.344	0.6	.414	----	----
Stone, clay, and glass products	3.2	.397	----	----	----	----
Fabricated metal products	0.2	.288	0.1	.600	----	----
VIRGINIA	3,658.9	.268	44.8	.358	533.6	.561
Metropolitan Area A	169.5	.272	5.1	.243	3.8	.623
Metropolitan Area B**	3.0	.365	----	----	2.1	.756
Metropolitan Area C	218.4	.292	1.8	.313	5.7	.722
Metropolitan Area D	108.0	.291	2.4	.244	7.1	.642
All other counties	3,160.0	.266	35.5	.383	514.9	.557
Industry Groups						
Food and kindred products	79.5	.302	8.3	.289	0.6	.477
Tobacco manufactures	88.1	.309	3.6	.346	----	----
Textile mill products	244.7	.278	5.4	.310	----	----
Apparel and related products	25.3	.309	0.5	.283	----	----
Lumber and products, except furniture	30.5	.281	0.5‡	.315‡	----	----
Furniture and fixtures	23.4	.264	2.0	.329	----	----
Paper and allied products	854.6	.262	----	----	----	----
Printing and publishing industries§	3.6	.351	0.7	.253	----	----
Chemicals and allied products	1,913.4	.267	0.1	.200	403.4	.545
Petroleum and coal products	0.2	.288	----	----	----	----
Leather and leather products	27.3	.263	----	----	----	----
Stone, clay, and glass products	268.4	.253	9.7	.293	2.8	.647
Primary metal industries	29.8	.279	10.6	.541	116.5	.603
Fabricated metal products	10.0	.295	0.4	.255	6.2	.711
Machinery (except electrical)	1.8	.316	0.1	.320	1.5	.605
Transportation equipment	48.8	.302	----	----	2.6	.685
Miscellaneous manufactures	3.2	.322	0.1	.320	----	----
WEST VIRGINIA	3,974.3	.168	18.6	.212	1,863.0	.301
Metropolitan Area A	1,071.5	.129	2.4	.207	1,249.4	.264
Metropolitan Area B	32.5	.198	3.3	.204	4.1	.633
Metropolitan Area C**	1,646.1	.178	1.3	.161	410.7	.289
All other counties	1,224.2	.187	11.6	.222	198.8	.548
Industry Groups						
Food and kindred products	34.2	.223	0.8	.227	1.4	.138
Textile mill products	42.2	.200	----	----	----	----
Apparel and related products	0.7	.262	0.1	.240	----	----
Lumber and products, except furniture	30.6	.215	2.8‡	.205‡	----	----
Furniture and fixtures	1.2	.226	----	----	----	----
Paper and allied products	26.9	.237	----	----	----	----
Printing and publishing industries§	1.0	.260	----	----	----	----
Chemicals and allied products	2,189.9	.172	----	----	410.0	.288
Petroleum and coal products	44.2	.181	----	----	----	----
Leather and leather products	43.5	.213	----	----	----	----
Stone, clay, and glass products	411.3	.230	2.0	.163	26.8	.472
Primary metal industries	1,070.4	.126	10.9	.224	1,333.8	.269
Fabricated metal products	54.3	.182	1.2	.230	1.8	.305
Machinery (except electrical)	5.2	.217	----	----	2.0	.605
Electrical machinery	8.1	.190	0.4	.265	83.1	.792
Miscellaneous manufactures	2.1	.215	----	----	----	----
NORTH CAROLINA	2,170.9	.292	115.7	.292	16.5	.643
Metropolitan Area A	198.4	.273	4.3	.294	0.1	.880
Metropolitan Area B	141.0	.296	0.6	.276	0.8	.641
Metropolitan Area C	196.7	.298	3.0	.315	1.5	.712
Metropolitan Area D	72.7	.299	4.4	.236	6.9	.669
Metropolitan Area E	9.5	.316	2.8	.122	----	----
All other counties	1,552.6	.293	100.6	.299	7.2	.599

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
190.7	\$0.440	27.6	\$0.962	----	\$----	200.3	\$0.646	51.5	\$3.538
118.6	.443	17.1	.983	----	----	158.2	.636	30.6	3.324
5.3	.483	----	----	----	----	2.0	.556	4.1	2.521
5.7	.530	6.4	.955	----	----	34.3	.704	12.4	3.955
0.6	.622	1.4	.800	----	----	0.5	.600	0.7	4.625
57.7	.410	0.1	1.000	----	----	0.3	.667	1.4	4.354
1.6	.646	1.8	1.053	----	----	2.2	.650	1.1	4.605
727.7	.509	270.9	.448	574.5	1.224	----	----	1,120.0	2.989
21.6	.580	----	----	75.9	1.256	----	----	35.9	3.973
3.2	.551	10.1	.736	----	----	----	----	11.4	3.779
69.8	.534	----	----	287.7	1.086	----	----	102.4	3.823
145.2	.430	----	----	100.9	1.312	----	----	101.7	3.818
487.9	.525	260.8	.437	110.0	1.480	----	----	868.6	2.743
102.7	.546	23.1	.724	283.9	1.217	----	----	120.1	4.172
7.0	.422	----	----	3.3	1.500	----	----	31.5	3.740
22.9	.634	9.4	.646	20.5	1.243	----	----	258.4	2.674
15.8	.537	2.1	.727	5.7	1.387	----	----	23.6	3.847
96.3	.571	----	----	----	----	----	----	20.6	5.495
5.4	.839	----	----	2.1	1.545	----	----	32.8	3.796
112.1	.479	----	----	3.1	1.412	----	----	100.5	2.701
5.5	.589	5.3	.732	31.1	1.345	----	----	9.3	6.650
165.7	.481	190.3	.344	3.3	1.278	----	----	340.4	2.050
6.9	.519	----	----	----	----	----	----	1.0	5.471
----	----	0.3	1.000	0.1	1.000	----	----	7.1	4.707
22.3	.598	1.7	.722	36.4	1.279	----	----	52.3	3.643
50.6	.591	0.4	.750	6.3	2.000	----	----	12.8	4.178
17.9	.544	12.1	.614	128.7	.970	----	----	28.3	3.931
2.5	.568	1.2	.692	5.4	1.483	----	----	2.8	6.438
91.9	.358	----	----	1.2	1.500	----	----	66.7	3.230
2.2	.537	24.6	.702	6.9	1.432	----	----	2.9	5.596
1,024.4	.489	40,860.4	.228	23,505.5	.365	92,602.1	.233	1,544.0	2.264
938.8	.475	4,094.4	.355	17,930.4	.313	88,165.6	.232	256.4	2.614
6.5	.576	5,532.2	.238	----	----	----	----	128.7	2.990
16.3	.427	18,912.2	.193	5,226.9	.442	----	----	670.6	1.718
62.8	.697	12,321.6	.235	348.2	.520	4,436.5	.241	488.3	2.637
11.4	.564	443.0	.288	7.4	1.700	----	----	29.6	4.674
0.5	.677	6.2	.431	----	----	----	----	9.9	3.837
----	----	27.7	.268	0.1	1.000	----	----	2.0	5.897
29.5	.642	9.3‡	.255‡	----	----	----	----	5.9	6.229
----	----	9.2	.268	----	----	----	----	1.7	5.569
----	----	26.0	.260	----	----	----	----	8.7	4.091
0.6	.676	61.7	.321	2.8	1.667	----	----	3.7	7.500
16.7	.429	9,578.1	.182	4,514.7	.460	----	----	687.1	1.682
6.0	.519	1,740.6	.206	18,761.1	.315	----	----	52.8	2.339
----	----	11.3	.294	----	----	----	----	3.4	4.716
54.9	.755	22,209.4	.233	215.9	.525	3,620.3	.230	229.5	2.894
897.5	.465	4,664.8	.281	----	----	88,165.6	.232	204.0	2.523
3.1	.677	1,143.4	.261	----	----	----	----	36.4	4.010
2.0	.766	179.5	.282	----	----	----	----	9.3	5.050
0.2	.833	248.0	.291	3.0	2.188	816.2	.291	236.0	1.872
0.2	.750	116.4	.300	0.5	1.667	----	----	2.9	4.818
675.6	.557	----	----	375.3	1.350	----	----	2,913.1	2.329
7.2	.751	----	----	4.9	1.577	----	----	46.2	2.832
15.4	.738	----	----	46.1	1.285	----	----	52.8	2.984
27.2	.665	----	----	28.1	1.224	----	----	145.8	2.791
20.7	.707	----	----	96.7	1.282	----	----	116.8	2.809
11.0	.641	----	----	15.0	1.568	----	----	20.9	3.091
594.1	.538	----	----	184.5	1.399	----	----	2,530.6	2.251

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
SOUTH ATLANTIC—continued						
NORTH CAROLINA—continued						
Industry Groups						
Food and kindred products	41.5	\$0.320	4.6	\$0.317	0.5	\$0.645
Tobacco manufactures	204.9	.283	1.5	.349	----	----
Textile mill products	847.2	.298	71.6	.261	0.2	.660
Apparel and related products	30.9	.313	0.2	.706	----	----
Lumber and products, except furniture	23.4	.279	-----†	-----†	-----†	-----†
Furniture and fixtures	49.6	.301	10.8	.327	0.1	.120
Paper and allied products	500.7	.281	----	----	----	----
Printing and publishing industries§	2.9	.375	2.5	.098	0.1	.240
Chemicals and allied products	209.8	.278	3.9	.347	1.0	.560
Leather and leather products	27.3	.283	3.6	.405	----	----
Stone, clay, and glass products	204.5	.306	14.3	.393	0.2	.500
Primary metal industries	9.3	.301	0.4	.382	8.9	.658
Fabricated metal products	6.9	.315	----	----	2.0	.649
Machinery (except electrical)	1.9	.388	0.7	.337	3.3	.663
Electrical machinery	3.9	.199	----	----	----	----
Transportation equipment	0.9	.462	0.8	.227	----	----
Miscellaneous manufactures	0.8	.352	0.8	.251	0.2	.320
SOUTH CAROLINA	1,393.4	.304	14.8	.300	15.9	.461
Metropolitan Area A	38.8	.342	0.8	.300	0.2	.560
Metropolitan Area B	45.1	.378	----	----	----	----
Metropolitan Area C	119.3	.285	0.5	.417	10.1	.396
All other counties	1,190.2	.302	13.5	.296	5.6	.572
Industry Groups						
Food and kindred products	19.0	.351	4.5	.227	0.5	.540
Tobacco manufactures	3.3	.329	----	----	----	----
Textile mill products	905.5	.298	7.5	.331	0.1	.600
Apparel and related products	49.4	.276	1.2	.292	----	----
Lumber and products, except furniture	22.5	.296	-----†	-----†	-----†	-----†
Furniture and fixtures	0.9	.263	0.2	.412	----	----
Paper and allied products	254.0	.315	----	----	0.1	.400
Printing and publishing industries§	1.0	.305	0.3	.382	----	----
Chemicals and allied products	19.3	.313	----	----	0.6	.369
Stone, clay, and glass products	109.8	.336	0.7	.354	0.1	.280
Primary metal industries	5.9	.310	0.4	.284	11.8	.442
Machinery (except electrical)	1.0	.298	----	----	2.7	.543
Transportation equipment	0.9	.297	----	----	----	----
Miscellaneous manufactures	0.2	.577	----	----	----	----
GEORGIA	843.8	.287	31.8	.279	29.9	.570
Metropolitan Area A	37.0	.225	----	----	----	----
Metropolitan Area B	71.1	.279	3.4	.266	18.0	.542
Metropolitan Area C	32.0	.294	0.2	.294	2.2	.595
Metropolitan Area D	60.5	.352	0.5	.425	0.3	.743
Metropolitan Area E	82.4	.281	----	----	1.0	.524
All other counties	560.8	.286	27.7	.277	8.4	.624
Industry Groups						
Food and kindred products	89.7	.284	8.3	.244	2.5	.403
Textile mill products	330.2	.290	9.5	.267	----	----
Apparel and related products	17.4	.294	3.2	.343	----	----
Lumber and products, except furniture	31.2	.278	-----†	-----†	-----†	-----†
Furniture and fixtures	8.4	.279	0.4	.265	----	----
Paper and allied products	44.9	.286	1.6	.259	----	----
Printing and publishing industries§	1.3	.387	0.4	.245	----	----
Chemicals and allied products	108.0	.269	6.4	.289	4.7	.464
Petroleum and coal products	0.1	.231	----	----	----	----
Leather and leather products	8.6	.309	0.1	.600	----	----
Stone, clay, and glass products	189.6	.295	0.9	.380	1.8	.574
Primary metal industries	3.6	.314	----	----	9.5	.611
Fabricated metal products	2.4	.297	0.1	.360	4.0	.615
Machinery (except electrical)	4.3	.306	0.1	.280	6.7	.612
Electrical machinery	1.8	.225	----	----	0.3	.797
Transportation equipment	1.1	.313	----	----	0.4	.545
Miscellaneous manufactures	0.5	.328	----	----	----	----

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
86.6	\$0.646	----	\$----	217.7	\$1.395	----	----	116.2	\$3.501
37.0	.499	----	----	2.1	1.273	----	----	50.1	3.022
78.1	.640	----	----	11.0	1.458	----	----	1,864.4	2.443
5.4	.460	----	----	5.3	1.517	----	----	45.1	2.449
142.3	.646	----	----	6.8‡	1.486‡	----	----	53.7	3.681
2.4	.477	----	----	9.2	.780	----	----	74.9	3.511
227.8	.444	----	----	3.6	1.368	----	----	65.4	2.408
2.4	.671	----	----	34.6	1.358	----	----	10.8	5.051
23.4	.476	----	----	5.5	1.600	----	----	47.9	3.767
----	----	----	----	----	----	----	----	4.6	3.834
44.8	.596	----	----	1.8	1.500	----	----	60.4	2.973
6.9	.530	----	----	4.1	.727	----	----	484.6	.776
6.5	.605	----	----	22.2	1.250	----	----	5.4	4.587
6.3	.744	----	----	22.9	.815	----	----	9.6	4.317
1.4	.644	----	----	17.5	1.681	----	----	11.4	3.157
1.5	.495	----	----	3.1	1.471	----	----	2.7	4.337
0.2	.750	----	----	7.9	1.488	----	----	1.0	6.000
1,167.0	.417	----	----	108.1	1.527	----	----	1,785.5	2.239
10.9	.652	----	----	18.9	1.255	----	----	76.8	2.562
18.4	.610	----	----	2.8	2.067	----	----	46.8	2.563
254.1	.341	----	----	16.2	1.356	----	----	161.0	1.558
883.6	.432	----	----	70.2	1.623	----	----	1,500.9	2.286
41.4	.566	----	----	49.7	1.403	----	----	59.6	3.542
----	----	----	----	0.7	1.750	----	----	1.8	4.262
46.7	.551	----	----	20.1	1.661	----	----	1,411.4	2.164
4.9	.717	----	----	3.4	1.611	----	----	30.7	2.621
128.8	.714	----	----	----	----	----	----	37.5	3.735
5.7	.609	----	----	0.3	1.500	----	----	9.4	3.492
849.6	.351	----	----	0.9	2.800	----	----	35.2	2.298
1.0	.613	----	----	9.6	1.481	----	----	3.0	5.765
31.0	.341	----	----	0.4	2.000	----	----	36.5	3.609
50.3	.471	----	----	14.8	1.738	----	----	23.7	3.273
1.9	.508	----	----	1.4	1.375	----	----	127.5	.966
2.3	.650	----	----	2.2	1.417	----	----	3.0	4.225
1.8	.688	----	----	0.5	1.333	----	----	3.6	4.780
0.5	.903	----	----	1.3	1.714	----	----	0.8	5.074
2,238.4	.421	9,196.4	.192	63.4	1.708	----	----	1,592.7	2.780
5.6	.625	----	----	----	----	----	----	31.7	2.131
150.1	.487	4,178.6	.199	----	----	----	----	215.5	3.492
11.4	.679	834.7	.187	----	----	----	----	158.3	2.429
173.5	.443	2.2	.565	13.9	1.547	----	----	68.4	2.895
1,073.0	.349	----	----	8.1	1.750	----	----	60.2	3.186
824.8	.493	4,180.9	.186	41.4	1.746	----	----	1,058.6	2.677
320.4	.394	1,160.3	.209	27.3	1.653	----	----	173.6	3.531
18.5	.564	1,810.5	.185	3.2	1.765	----	----	1,061.7	2.315
10.2	.593	318.6	.202	1.6	1.667	----	----	26.1	4.541
254.8	.704	3.4‡	.194‡	----	----	----	----	30.6	5.243
2.4	.523	48.7	.256	2.0	1.545	----	----	10.7	4.981
1,087.5	.350	198.6	.174	----	----	----	----	18.1	3.508
1.3	.370	90.4	.264	8.1	1.750	----	----	9.6	6.076
60.3	.443	701.1	.185	----	----	----	----	76.8	3.752
45.2	.354	----	----	----	----	----	----	7.3	2.867
----	----	4.3	.200	0.7	1.750	----	----	3.5	4.403
334.3	.425	2,362.8	.184	14.7	1.747	----	----	76.3	2.991
70.1	.504	1,553.4	.176	----	----	----	----	31.5	3.252
2.4	.423	53.4	.278	3.9	1.762	----	----	8.1	5.112
17.3	.582	450.0	.226	0.7	2.000	----	----	27.5	3.707
1.7	.819	68.1	.302	----	----	----	----	10.7	3.290
11.2	.434	266.6	.189	----	----	----	----	15.3	2.962
0.1	1.167	82.5	.224	1.2	2.000	----	----	3.8	4.415

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
SOUTH ATLANTIC—continued						
FLORIDA	53.8	\$0.296	2.5	\$0.403	7.4	\$0.542
Metropolitan Area A	10.3	.310	0.3	.382	1.4	.620
Metropolitan Area B	3.6	.384	1.9	.391	2.7	.569
Metropolitan Area C	1.2	.283	----	----	0.3	.811
All other counties	38.7	.284	0.3	.500	3.0	.456
Industry Groups						
Food and kindred products	4.6	.335	0.5	.457	0.4	.667
Tobacco manufactures	0.1	.462	0.7	.253	----	----
Apparel and related products	0.1	.462	----	----	----	----
Lumber and products, except furniture	19.3	.305	----	----	----	----
Furniture and fixtures	0.5	.382	----	----	----	----
Paper and allied products	18.3	.255	----	----	----	----
Printing and publishing industries§	0.1	.269	----	----	----	----
Chemicals and allied products	1.1	.392	----	----	5.4	.485
Stone, clay, and glass products	8.2	.301	----	----	----	----
Primary metal industries	----	----	0.1	.320	0.7	.839
Fabricated metal products	0.2	.385	----	----	0.1	.360
Machinery (except electrical)	----	----	0.1	.280	0.7	.649
Electrical machinery	----	----	----	----	----	----
Transportation equipment	1.1	.406	1.1	.484	0.1	.400
Miscellaneous manufactures	0.2	.327	----	----	----	----
EAST SOUTH CENTRAL						
KENTUCKY	1,521.7	.203	22.0	.246	697.5	.387
Metropolitan Area A	775.1	.193	7.6	.247	94.8	.680
Metropolitan Area B	186.3	.227	2.0	.321	3.7	.597
Metropolitan Area C	83.1	.191	----	----	598.0	.339
All other counties	477.2	.213	12.4	.234	1.0	.637
Industry Groups						
Food and kindred products	649.7	.209	3.3	.341	0.2	.760
Tobacco manufactures	73.4	.209	0.7	.421	----	----
Textile mill products	24.1	.206	1.4	.289	----	----
Apparel and related products	7.7	.248	0.4	.265	----	----
Lumber and products, except furniture	56.7	.227	----	----	----	----
Furniture and fixtures	39.0	.179	0.8	.158	----	----
Paper and allied products	4.2	.197	----	----	----	----
Printing and publishing industries§	1.6	.305	----	----	----	----
Chemicals and allied products	142.4	.164	----	----	73.7	.687
Petroleum and coal products	42.9	.196	----	----	----	----
Leather and leather products	17.6	.214	----	----	----	----
Stone, clay, and glass products	183.3	.191	11.3	.220	----	----
Primary metal industries	197.3	.224	3.6	.198	604.7	.342
Fabricated metal products	31.5	.203	0.1	.520	16.4	.662
Machinery (except electrical)	34.0	.187	0.1	.360	2.2	.606
Electrical machinery	0.4	.276	----	----	----	----
Miscellaneous manufactures	2.2	.255	0.1	.120	----	----
TENNESSEE	3,032.2	.212	23.0	.304	413.3	.460
Metropolitan Area A	61.2	.221	3.5	.208	8.3	.576
Metropolitan Area B	479.8	.167	1.8	.245	7.5	.599
Metropolitan Area C	378.9	.223	6.3	.292	77.7	.581
Metropolitan Area D**	248.9	.230	2.7	.431	4.5	.434
All other counties	1,863.4	.219	8.7	.323	315.3	.425
Industry Groups						
Food and kindred products	167.4	.217	7.9	.293	2.7	.567
Tobacco manufactures	18.0	.212	0.1	.240	----	----
Textile mill products	156.2	.234	2.5	.280	----	----
Apparel and related products	11.3	.259	0.6	.362	----	----
Lumber and products, except furniture	33.6	.244	0.1‡	.360‡	----	----
Furniture and fixtures	12.9	.253	0.5	.181	----	----
Paper and allied products	253.7	.214	1.1	.229	----	----
Printing and publishing industries§	9.1	.272	0.3	.303	----	----
Chemicals and allied products	1,372.1	.200	0.2	.353	109.9	.339

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
2,775.0	\$0.379	3,703.1	\$0.113	282.6	\$1.629	-----	\$-----	389.1	\$4.313
403.2	.372	-----	-----	78.3	1.428	-----	-----	58.8	4.604
607.3	.340	-----	-----	109.7	1.514	-----	-----	76.0	4.410
54.1	.533	-----	-----	32.2	2.138	-----	-----	35.6	5.701
1,710.4	.390	3,703.1	.113	62.4	1.822	-----	-----	218.7	3.976
700.4	.433	29.4	.220	132.5	1.612	-----	-----	171.0	4.709
6.2	.581	-----	-----	3.5	1.947	-----	-----	8.8	4.720
1.3	.593	-----	-----	2.4	2.000	-----	-----	1.0	9.559
74.0	.540	-----	-----	1.0‡	2.000‡	-----	-----	9.9	7.047
1.5	.495	3.5	.378	1.5	1.875	-----	-----	2.5	8.753
1,291.0	.363	2,547.4	.106	0.8	2.000	-----	-----	66.5	2.848
2.4	.604	-----	-----	27.8	1.920	-----	-----	13.4	7.031
186.9	.363	1,122.8	.126	1.8	2.300	-----	-----	72.3	3.352
479.2	.315	-----	-----	28.2	1.566	-----	-----	9.6	5.595
3.5	.442	-----	-----	0.2	3.000	-----	-----	1.8	4.918
1.3	.704	-----	-----	58.3	1.365	-----	-----	5.2	6.147
3.7	.559	-----	-----	4.1	2.182	-----	-----	2.5	6.494
0.3	.579	-----	-----	7.5	1.900	-----	-----	0.5	11.176
11.2	.595	-----	-----	2.7	1.867	-----	-----	15.2	4.674
9.4	.413	-----	-----	4.0	1.955	-----	-----	1.3	8.955
1,008.6	.503	7,672.7	.326	1,019.9	.593	1,943.4	.377	1,010.9	2.719
433.6	.492	299.8	.332	42.0	1.137	1,940.5	.377	728.2	2.405
462.3	.488	842.8	.463	-----	-----	0.1	1.000	28.9	4.168
11.9	.585	3,911.8	.344	972.7	.469	-----	-----	125.4	2.367
100.8	.613	2,618.3	.253	5.2	1.714	2.8	.480	128.4	4.517
61.8	.601	244.9	.361	16.1	1.655	181.6	.456	140.6	3.944
12.8	.427	3.4	.361	-----	-----	5.9	.519	19.7	4.342
0.4	.640	3.3	.371	-----	-----	1.8	.500	13.8	4.197
8.8	.535	15.0	.354	0.6	2.000	8.0	.493	7.5	5.973
43.5	.651	1.6‡	.294‡	-----¶	-----¶	0.6‡	.600‡	24.1	4.819
2.7	.449	33.1	.333	0.2	-----¶	13.6	.472	20.5	4.283
1.0	.419	14.4	.404	-----	-----	1.0	.444	1.5	5.588
8.0	.452	53.3	.336	24.0	.777	89.9	.414	18.2	3.551
32.1	.492	191.8	.323	0.3	1.000	53.3	.458	452.9	1.731
63.6	.441	634.2	.294	972.7	.469	-----	-----	37.4	2.771
-----¶	-----¶	21.5	.195	0.9	.800	-----	-----	3.5	5.538
20.1	.677	2,753.7	.227	3.0	1.750	48.9	.464	43.5	3.309
586.0	.494	3,440.9	.406	-----	-----	87.2	.424	131.3	2.420
12.3	.476	71.2	.341	-----¶	-----¶	997.5	.345	41.0	3.382
70.6	.517	17.9	.362	2.0	1.727	422.9	.364	36.6	3.674
3.8	.534	123.2	.361	-----	-----	8.3	.413	8.7	4.199
0.2	.917	18.2	.393	-----	-----	6.2	.554	2.6	6.079
534.0	.609	8,297.3	.180	1,012.1	.742	8.8	.962	5,030.0	1.206
30.8	.411	7,319.9	.168	27.4	.831	-----	-----	353.9	1.922
40.9	.586	271.6	.313	53.1	1.028	-----	-----	132.0	2.142
179.2	.606	134.7	.487	809.7	.643	-----	-----	446.2	1.518
17.6	.657	0.2	-----¶	64.6	1.272	-----	-----	164.7	1.774
265.5	.634	570.9	.197	57.3	1.233	8.8	.962	3,933.2	1.051
51.9	.596	1,343.1	.191	131.4	1.120	7.9	.944	204.9	2.401
5.0	.642	667.9	.161	8.0	1.395	-----	-----	1.7	5.310
2.1	.538	44.9	.193	6.7	.611	0.8	1.143	225.9	1.812
84.2	.552	3.5‡	.270‡	0.2‡	1.000‡	-----¶	-----¶	27.8	2.852
1.6	.576	52.9	.198	0.1	1.000	-----	-----	36.1	3.439
0.4	.680	888.2	.202	9.1	.878	-----	-----	21.2	3.141
0.8	.660	88.6	.227	21.9	1.229	-----	-----	94.6	1.630
91.8	.589	1,789.4	.190	38.8	.971	-----	-----	18.7	3.298
								926.7	1.098

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
EAST SOUTH CENTRAL—continued						
TENNESSEE—continued						
Petroleum and coal products	1.2	\$0.217	---	\$----	---	\$----
Leather and leather products	13.3	.246	3.0	.249	---	---
Stone, clay, and glass products	701.9	.211	2.9	.248	12.0	.557
Primary metal industries	203.7	.258	1.4	.399	232.0	.477
Fabricated metal products	19.1	.240	0.3	.658	46.0	.625
Machinery (except electrical)	10.6	.231	1.2	.593	10.7	.507
Electrical machinery	14.8	.265	---	---	---	---
Transportation equipment	7.3	.240	0.3	.303	---	---
Miscellaneous manufactures	3.4	.244	0.6	.270	---	---
ALABAMA	1,329.3	.237	52.9	.179	5,150.8	.415
Metropolitan Area A	777.1	.226	37.1	.128	4,602.9	.409
Metropolitan Area B	0.1	.423	---	---	0.3	.541
Metropolitan Area C	20.8	.274	0.7	.275	0.3	.568
Metropolitan Area D	7.4	.308	0.1	.240	1.6	.592
All other counties	523.9	.251	15.0	.299	545.7	.462
Industry Groups						
Food and kindred products	27.8	.297	1.4	.289	0.8	.545
Textile mill products	173.9	.297	0.5	.362	---	---
Apparel and related products	8.7	.302	1.5	.270	0.1	.600
Lumber and products, except furniture	21.9	.270	4.3‡	.247‡	---	---
Furniture and fixtures	1.1	.302	0.2	.314	---	---
Paper and allied products	89.7	.202	---	---	---	---
Printing and publishing industries§	0.8	.395	0.1	.320	---	---
Chemicals and allied products	104.9	.229	1.1	.280	117.8	.663
Petroleum and coal products	125.7	.208	0.2	.431	---	---
Stone, clay, and glass products	440.6	.227	0.9	.240	2.2	.518
Primary metal industries	234.7	.232	36.3	.122	5,001.6	.408
Fabricated metal products	4.1	.402	0.7	.365	7.2	.538
Machinery (except electrical)	12.3	.262	0.1	.120	20.5	.561
Electrical machinery	---	---	---	---	---	---
Transportation equipment	2.8	.327	0.1	.240	0.6	.631
Miscellaneous manufactures	0.4	.314	---	---	---	---
MISSISSIPPI	70.6	.246	8.9	.274	1.3	.637
Metropolitan Area A	1.0	.271	---	---	0.5	.702
All other counties	69.6	.245	8.9	.274	0.8	.596
Industry Groups						
Food and kindred products	11.6	.271	0.7	.337	---	---
Textile mill products	1.1	.295	5.0	.252	---	---
Apparel and related products	1.2	.255	0.7	.242	---	---
Lumber and products, except furniture	34.5	.223	---	---	---	---
Furniture and fixtures	0.2	.385	---	---	---	---
Paper and allied products	0.8	.276	---	---	---	---
Printing and publishing industries§	---	---	---	---	---	---
Chemicals and allied products	3.6	.261	1.7	.278	---	---
Stone, clay, and glass products	16.5	.272	0.8	.369	---	---
Primary metal industries	---	---	---	---	0.9	.655
Fabricated metal products	---	---	---	---	---	---
Machinery (except electrical)	0.6	.127	---	---	0.4	.596
Transportation equipment	0.1	.385	---	---	---	---
Miscellaneous manufactures	---	---	---	---	---	---
WEST SOUTH CENTRAL						
ARKANSAS	46.8	.248	16.1	.216	1.3	.410
Metropolitan Area A	4.7	.203	1.0	.295	0.1	.320
All other counties	42.1	.253	15.1	.210	1.2	.416
Industry Groups						
Food and kindred products	11.0	.257	1.2	.334	---	---
Apparel and related products	0.4	.238	---	---	---	---
Lumber and products, except furniture	18.1	.235	---	---	---	---
Furniture and fixtures	4.4	.277	0.3	.276	---	---

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
3.4	\$0.678	744.7	\$0.165	----	\$-----	-----	\$-----	9.0	\$1.622
0.9	.625	3.7	.256	0.6	1.333	-----	-----	11.7	3.078
94.1	.638	566.5	.192	423.4	.555	-----	-----	187.2	1.780
34.0	.624	80.7	.195	88.2	.546	-----	-----	2,975.9	.909
137.1	.624	89.6	.242	264.2	.782	0.1	1.000	82.4	2.283
14.9	.640	62.0	.221	5.3	1.345	-----	-----	19.1	2.880
1.5	.602	39.0	.251	-----	-----	-----	-----	11.5	2.531
-----	-----	292.6	.223	1.6	1.111	-----	-----	27.3	2.192
0.4	.920	10.5	.218	2.4	1.077	-----	-----	4.1	3.671
1,439.4	.562	24,268.7	.143	6,849.0	.250	43,571.6	.182	4,078.1	1.653
512.6	.502	5,471.7	.165	4,689.3	.254	35,337.1	.178	906.3	2.265
2.1	.777	799.6	.175	-----	-----	-----	-----	4.3	4.293
14.9	.511	608.8	.185	-----	-----	-----	-----	29.5	3.644
86.2	.378	11,460.6	.126	-----	-----	497.2	.173	177.6	2.371
823.6	.619	5,928.0	.147	2,159.7	.231	7,737.3	.193	2,960.4	1.399
29.4	.600	396.1	.206	267.9	.484	28.1	.310	82.8	3.543
8.7	.618	262.7	.187	-----	-----	-----	-----	624.0	2.112
4.8	.520	24.4	.180	1.9	.400	7.0	.333	12.8	3.162
224.5	.690	64.1‡	.174‡	6.0‡	.500‡	-----	-----	36.2	4.304
-----	-----	8.0	.262	34.2	.492	1.1	.500	3.5	4.765
9.2	.344	4,472.0	.133	-----	-----	708.0	.160	107.0	2.030
-----	-----	43.4	.204	31.3	.580	4.5	.293	5.3	5.586
81.3	.578	4,817.8	.120	2,404.2	.250	0.1	-----	683.9	1.224
12.7	.551	622.4	.164	19.2	.356	7,583.0	.208	35.5	3.192
22.4	.549	11,388.5	.144	178.3	.247	2.6	.333	243.8	1.892
976.2	.540	1,361.6	.183	3,347.6	.200	35,230.9	.181	2,008.5	1.341
8.0	.530	222.2	.231	277.8	.485	1.5	.286	32.3	3.113
8.2	.705	262.5	.178	271.4	.301	1.4	.615	28.3	3.819
4.5	.527	39.4	.220	4.5	.667	-----	-----	0.7	5.833
47.7	.379	281.9	.181	-----	-----	-----	-----	31.3	2.815
0.1	.667	1.4	.200	1.5	.875	3.3	.333	1.1	5.421
251.9	.510	17,271.3	.140	-----	-----	-----	-----	395.4	2.879
8.4	.480	1,689.9	.168	-----	-----	-----	-----	43.4	3.675
243.5	.511	15,581.4	.136	-----	-----	-----	-----	352.0	2.781
42.2	.455	795.1	.206	-----	-----	-----	-----	62.8	3.542
25.1	.382	238.5	.177	-----	-----	-----	-----	41.8	2.036
3.3	.571	105.6	.256	-----	-----	-----	-----	8.4	4.603
133.0	.573	398.7‡	.174‡	-----	-----	-----	-----	52.7	3.804
-----	-----	64.4	.176	-----	-----	-----	-----	6.9	3.843
4.1	.480	11,444.7	.122	-----	-----	-----	-----	89.4	1.978
-----	-----	55.3	.248	-----	-----	-----	-----	2.4	8.451
40.8	.429	1,116.4	.178	-----	-----	-----	-----	44.0	3.582
0.2	1.000	2,103.6	.152	-----	-----	-----	-----	21.2	3.104
-----	-----	8.4	.307	-----	-----	-----	-----	0.5	6.529
-----	-----	31.1	.202	-----	-----	-----	-----	0.9	7.194
0.7	.791	323.0	.169	-----	-----	-----	-----	1.3	4.114
1.2	.568	23.6	.512	-----	-----	-----	-----	37.5	1.595
0.3	.421	13.3	.179	-----	-----	-----	-----	0.4	8.500
330.5	.496	46,056.3	.078	-----	-----	-----	-----	406.2	2.969
13.1	.550	862.4	.154	-----	-----	-----	-----	35.6	3.727
317.4	.493	45,193.9	.076	-----	-----	-----	-----	370.6	2.896
32.2	.485	1,308.4	.161	-----	-----	-----	-----	54.8	4.416
1.3	.568	11.6	.270	-----	-----	-----	-----	1.5	5.647
165.1	.510	193.3‡	.131‡	-----	-----	-----	-----	40.4	3.512
1.7	.505	216.0	.144	-----	-----	-----	-----	8.8	3.767

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and / INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
WEST SOUTH CENTRAL—continued						
ARKANSAS—continued						
Paper and allied products	----	\$-----	----	\$-----	----	\$-----
Printing and publishing industries§	0.7	.240	----	----	----	----
Chemicals and allied products	8.3	.229	0.5	.346	----	----
Petroleum and coal products	----	----	----	----	----	----
Leather and leather products	0.5	.267	----	----	----	----
Stone, clay, and glass products	2.3	.340	0.2	.294	----	----
Primary metal industries	0.7	.142	13.9	.196	1.2	.416
Fabricated metal products	0.3	.228	----	----	0.1	.320
Machinery (except electrical)	----	----	----	----	----	----
Transportation equipment	----	----	----	----	----	----
Miscellaneous manufactures	0.1	.346	----	----	----	----
LOUISIANA	30.9	.211	1.6	.298	51.2	.587
Metropolitan Area A	0.8	.190	----	----	0.4	.556
Metropolitan Area B	1.3	.381	0.2	.451	0.8	.404
All other counties	28.8	.204	1.4	.275	50.0	.590
Industry Groups						
Food and kindred products	6.4	.292	1.4	.275	0.5	.581
Textile mill products	----	----	----	----	----	----
Apparel and related products	----	----	----	----	----	----
Lumber and products, except furniture	18.4	.167	----	----	----	----
Furniture and fixtures	0.1	.385	----	----	----	----
Paper and allied products	4.7	.241	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	0.2	.404	0.1	.120	43.7	.590
Petroleum and coal products	----	----	----	----	----	----
Stone, clay, and glass products	0.2	.269	----	----	----	----
Primary metal industries	----	----	----	----	4.3	.605
Fabricated metal products	----	----	----	----	0.5	.323
Machinery (except electrical)	----	----	----	----	1.5	.642
Transportation equipment	0.6	.350	0.1	.720	0.7	.374
Miscellaneous manufactures	0.1	.154	----	----	----	----
OKLAHOMA	136.1	.150	29.6	.298	24.6	.395
Metropolitan Area A	0.5	.252	0.1	.120	6.1	.518
Metropolitan Area B	0.2	.308	----	----	0.6	.584
All other counties	135.4	.150	29.5	.299	17.9	.346
Industry Groups						
Food and kindred products	1.5	.260	0.4	.608	0.3	.622
Apparel and related products	----	----	----	----	----	----
Lumber and products, except furniture	1.5	.224	----	----	----	----
Furniture and fixtures	0.2	.288	----	----	----	----
Paper and allied products	----	----	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	0.1	.154	----	----	----	----
Petroleum and coal products	0.1	.269	----	----	----	----
Stone, clay, and glass products	106.7	.125	----	----	2.1	.576
Primary metal industries	25.7	.239	29.2	.293	18.7	.347
Fabricated metal products	0.1	.423	----	----	0.4	.646
Machinery (except electrical)	0.1	.192	----	----	1.6	.584
Transportation equipment	0.1	.192	----	----	----	----
Instruments and related products	----	----	----	----	----	----
TEXAS	32.3	.242	48.4	.321	252.4	.564
Metropolitan Area A	3.8	.260	0.3	.382	24.2	.707
Metropolitan Area B	0.1	.462	0.2	.569	9.1	.517
Metropolitan Area C	1.1	.267	----	----	5.2	.666
Metropolitan Area D	----	----	----	----	0.3	.649
Metropolitan Area E	----	----	----	----	----	----
Metropolitan Area F	3.7	.163	----	----	1.0	.790
Metropolitan Area G	0.1	.231	0.1	.440	106.4	.583
Metropolitan Area H	----	----	----	----	0.6	.738
All other counties	23.5	.249	47.8	.319	105.6	.509

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
20.6	\$0.291	4,593.8	\$0.091	----	\$----	----	----	86.8	\$2.390
0.5	.452	92.1	.169	----	----	----	----	3.4	6.405
43.6	.549	15,845.4	.062	----	----	----	----	96.7	2.572
7.3	.532	8,272.7	.078	----	----	----	----	20.0	2.428
----	----	14.7	.195	----	----	----	----	1.2	5.683
----	----	5,566.6	.109	----	----	----	----	34.1	2.642
57.2	.486	9,699.3	.063	----	----	----	----	46.4	2.343
----	----	68.0	.155	----	----	----	----	2.5	4.541
0.1	1.333	51.8	.140	----	----	----	----	0.7	6.250
0.4	.440	15.2	.231	----	----	----	----	0.5	7.471
0.4	.600	33.8	.194	----	----	----	----	1.6	5.182
586.8	.433	128,380.8	.085	----	----	----	----	1,726.4	1.859
0.2	.750	4,170.2	.087	----	----	----	----	31.1	3.874
77.4	.430	14,435.3	.105	----	----	----	----	263.6	3.004
509.2	.433	109,775.3	.083	----	----	----	----	1,431.7	1.604
268.7	.442	14,569.9	.112	----	----	----	----	121.4	3.934
0.1	.500	198.3	.130	----	----	----	----	15.6	2.731
0.4	.480	128.9	.166	----	----	----	----	5.4	6.130
191.9	.444	654.2‡	.137‡	----	----	----	----	27.6	5.279
----	----	14.3	.247	----	----	----	----	2.8	5.146
0.1	.833	30,674.3	.089	----	----	----	----	271.3	1.672
0.2	.667	103.6	.157	----	----	----	----	5.7	6.443
60.7	.350	26,274.4	.088	----	----	----	----	864.9	1.502
3.2	.369	50,182.8	.071	----	----	----	----	312.4	1.114
11.0	.411	4,797.5	.091	----	----	----	----	35.1	2.453
----	----	99.6	.186	----	----	----	----	6.3	4.972
0.8	.700	296.1	.161	----	----	----	----	16.8	4.780
0.4	.480	131.4	.144	----	----	----	----	5.9	4.940
49.2	.441	76.4	.135	----	----	----	----	32.9	3.455
0.1	1.000	159.0	.117	----	----	----	----	1.9	6.446
175.5	.379	56,279.8	.100	----	----	----	----	485.2	2.867
110.5	.333	11,728.9	.103	----	----	----	----	117.5	2.883
1.9	.483	3,111.0	.127	----	----	----	----	40.3	4.248
63.1	.457	41,439.9	.097	----	----	----	----	327.4	2.691
34.6	.484	3,657.7	.150	----	----	----	----	99.2	3.923
----	----	15.8	.253	----	----	----	----	0.4	9.429
6.2	.490	184.5‡	.146‡	----	----	----	----	2.1	5.764
----	----	63.5	.163	----	----	----	----	0.8	7.630
----	----	37.6	.165	----	----	----	----	0.7	6.208
----	----	163.4	.191	----	----	----	----	7.3	6.627
13.8	.425	2,755.7	.064	----	----	----	----	20.2	3.241
2.5	.510	28,511.2	.097	----	----	----	----	188.3	2.045
----	----	9,012.4	.097	----	----	----	----	37.2	3.143
108.7	.332	10,214.1	.090	----	----	----	----	34.1	2.645
2.0	.532	236.7	.175	----	----	----	----	12.1	5.000
1.8	.402	647.3	.156	----	----	----	----	26.8	3.881
----	----	151.3	.135	----	----	----	----	2.6	4.146
----	----	6.9	.319	----	----	----	----	1.3	4.818
1,103.7	.425	362,548.6	.075	505.4	.194	----	----	2,370.6	2.740
13.1	.361	5,525.9	.166	----	----	----	----	100.5	2.537
63.3	.416	8,654.0	.108	----	----	----	----	259.3	2.604
30.6	.472	11,547.7	.116	----	----	----	----	175.6	3.331
18.4	.486	3,018.6	.113	----	----	----	----	58.1	2.845
7.1	.461	546.1	.136	----	----	----	----	9.5	4.167
40.0	.390	5,811.6	.119	----	----	----	----	81.0	2.941
239.3	.322	97,754.1	.070	312.0	.196	----	----	582.6	2.547
16.0	.393	78,771.6	.063	193.4	.193	----	----	167.6	2.179
675.9	.462	150,919.0	.074	----	----	----	----	936.4	2.871

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
WEST SOUTH CENTRAL—continued						
TEXAS—continued						
Industry Groups						
Food and kindred products	2.6	\$0.232	0.2	\$0.412	2.3	\$0.591
Textile mill products	1.8	.110	----	----	----	----
Apparel and related products	----	----	----	----	----	----
Lumber and products, except furniture	13.6	.273	----	----	----	----
Furniture and fixtures	0.4	.305	0.2	.549	----	----
Paper and allied products	----	----	----	----	----	----
Printing and publishing industries§	0.1	.385	0.1	.240	----	----
Chemicals and allied products	1.7	.112	----	----	24.8	.462
Petroleum and coal products	----	----	----	----	----	----
Leather and leather products	----	----	----	----	----	----
Stone, clay, and glass products	5.3	.215	0.3	.303	0.1	.480
Primary metal industries	6.0	.259	47.5	.318	218.4	.571
Fabricated metal products	----	----	0.1	.720	0.7	.741
Machinery (except electrical)	0.1	.462	----	----	5.6	.713
Electrical machinery	----	----	----	----	0.4	.747
Transportation equipment	0.1	.462	----	----	0.1	.400
Instruments and related products	----	----	----	----	----	----
Miscellaneous manufactures	0.6	.236	----	----	----	----
MOUNTAIN						
MONTANA	230.6	.184	0.4	.373	80.1	.491
Industry Groups						
Food and kindred products	118.6	.166	0.2	.569	2.5	.894
Lumber and products, except furniture†	6.6	.141	----	----	----	----
Printing and publishing industries§	0.1	.308	----	----	----	----
Chemicals and allied products	0.6	.567	----	----	----	----
Petroleum and coal products	----	----	----	----	----	----
Stone, clay, and glass products	62.5	.189	----	----	0.1	.200
Fabricated metal products	----	----	----	----	0.2	.560
Machinery (except electrical)	0.3	.506	0.1	.280	0.3	.797
IDAHO	283.3	.284	2.3	.375	39.8	.568
Industry Groups						
Food and kindred products	200.4	.274	2.1	.362	7.1	.868
Lumber and products, except furniture	12.7	.165	----	----	----	----
Printing and publishing industries§	0.5	.374	----	----	----	----
Chemicals and allied products	1.2	.252	0.1	.200	----	----
Stone, clay, and glass products	26.7	.281	0.1	.560	----	----
Machinery (except electrical)	0.5	.405	----	----	0.9	.130
WYOMING	89.0	.156	1.0	.252	0.2	1.040
Industry Groups						
Food and kindred products	28.8	.123	1.0	.252	0.2	1.000
Lumber and products, except furniture	8.4	.183	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	----	----	----	----	----	----
Petroleum and coal products	----	----	----	----	----	----
Stone, clay, and glass products	51.6	.169	----	----	----	----
COLORADO	709.2	.186	12.7	.254	845.3	.457
Metropolitan Area A**	160.3	.190	2.8	.298	15.6	.734
All other counties	548.9	.185	9.9	.241	829.7	.452
Industry Groups						
Food and kindred products	513.8	.184	8.9	.229	14.2	.686
Apparel and related products	0.5	.313	----	----	----	----
Lumber and products, except furniture	10.1	.244	0.1‡	.240‡	----	----
Furniture and fixtures	0.4	.276	----	----	0.2	.280
Paper and allied products	0.4	.171	----	----	----	----
Printing and publishing industries§	1.0	.256	0.3	.289	----	----
Chemicals and allied products	18.7	.225	0.8	.310	----	----
Petroleum and coal products	0.3	.329	----	----	----	----

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
120.0	\$0.466	12,349.7	\$0.132	----	\$----	----	\$----	463.9	\$3.361
18.2	.412	826.4	.145	----	----	----	----	67.9	2.767
2.1	.500	531.6	.168	----	----	----	----	15.7	5.970
144.2	.446	1,159.2‡	.115‡	----	----	----	----	55.9	3.208
1.1	.529	171.7	.180	----	----	----	----	10.7	5.822
2.4	.490	5,592.6	.105	----	----	----	----	43.8	4.172
0.5	.419	891.3	.142	----	----	----	----	27.6	5.777
444.2	.473	53,917.8	.102	----	----	----	----	474.8	2.278
32.9	.332	234,991.1	.058	193.4	.193	----	----	435.0	2.059
0.2	.583	102.9	.121	----	----	----	----	1.9	6.123
47.1	.406	29,192.5	.107	----	----	----	----	227.0	2.461
241.5	.324	17,456.4	.083	312.0	.196	----	----	211.1	2.338
4.0	.536	701.6	.144	----	----	----	----	49.7	3.886
5.3	.426	2,454.1	.112	----	----	----	----	110.8	3.276
----	----	220.2	.149	----	----	----	----	14.3	3.230
38.7	.379	1,446.8	.115	----	----	----	----	127.9	2.533
0.1	.667	47.8	.165	----	----	----	----	1.8	4.541
1.2	.473	91.9	.197	----	----	----	----	4.6	5.879
100.0	.478	10,435.1	.131	----	----	----	----	1,003.5	1.309
15.9	.464	1,103.7	.164	----	----	----	----	26.9	3.732
37.4	.686	14.5‡	.243‡	----	----	----	----	11.2	3.830
0.2	.833	30.2	.230	----	----	----	----	1.8	6.820
0.1	.500	374.1	.126	----	----	----	----	15.8	1.471
----	----	1,840.3	.111	----	----	----	----	5.0	3.263
38.3	.317	312.6	.180	----	----	----	----	27.9	2.303
0.2	.417	15.2	.306	----	----	----	----	0.8	5.296
0.1	1.000	5.6	.390	----	----	----	----	0.7	5.042
422.1	.518	----	----	0.3	2.500	----	----	310.5	1.627
262.2	.509	----	----	0.3	2.500	----	----	52.4	3.231
61.9	.564	----	----	----	----	----	----	46.5	1.601
0.6	.486	----	----	----	----	----	----	2.5	5.094
1.8	1.009	----	----	----	----	----	----	5.3	2.227
1.0	.968	----	----	----	----	----	----	7.5	2.141
0.3	.579	----	----	----	----	----	----	1.3	4.205
68.5	.419	6,990.7	.108	----	----	----	----	60.7	3.217
49.2	.418	920.4	.131	----	----	----	----	3.2	6.083
2.2	.625	11.6‡	.148‡	----	----	----	----	1.6	3.764
----	----	10.1	.264	----	----	----	----	0.6	8.450
3.6	.489	3.2	.294	----	----	----	----	0.8	3.333
13.4	.369	5,865.2	.102	----	----	----	----	37.2	3.370
----	----	144.9	.135	----	----	----	----	16.8	1.960
690.4	.419	11,042.5	.137	6.2	1.273	11,073.1	.145	253.3	3.465
124.9	.352	4,694.0	.154	----	----	----	----	176.0	3.472
565.5	.434	6,348.5	.125	6.2	1.273	11,073.1	.145	77.3	3.448
52.3	.415	3,248.3	.152	3.4	1.611	----	----	57.2	4.586
----	----	28.3	.239	----	----	----	----	0.6	11.450
8.4	.666	1.4‡	.267‡	----‡	----‡	----	----	3.4	6.103
1.1	.294	23.1	.165	----	----	----	----	0.5	11.059
43.2	.256	9.2	.351	----	----	----	----	6.8	2.935
1.1	.559	86.7	.271	2.1	.818	----	----	5.8	7.424
19.4	.308	243.7	.177	----	----	----	----	59.4	2.280
0.3	.526	80.6	.141	----	----	----	----	21.9	1.588

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
MOUNTAIN—continued						
COLORADO—continued						
Leather and leather products	0.3	\$0.241	0.1	\$0.240	----	\$----
Stone, clay, and glass products	93.0	.180	2.1	.304	3.6	.656
Primary metal industries	32.4	.183	0.2	.275	823.4	.452
Fabricated metal products	0.9	.335	0.1	.240	0.6	.631
Machinery (except electrical)	31.0	.184	----	----	3.3	.633
Electrical machinery	----	----	----	----	----	----
Transportation equipment	1.6	.277	0.1	.320	----	----
Miscellaneous manufactures	1.8	.155	----	----	----	----
NEW MEXICO	6.9	.188	0.4	.255	0.1	1.160
Industry Groups						
Food and kindred products	2.0	.210	0.4	.245	----	----
Lumber and products, except furniture	3.6	.138	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	----	----	----	----	----	----
Petroleum and coal products	----	----	----	----	----	----
Stone, clay, and glass products	1.2	.287	----	----	----	----
ARIZONA	9.6	.354	6.9	.392	5.6	.558
Metropolitan Area A	9.4	.351	----	----	4.9	.537
All other counties	0.2	.519	6.9	.392	0.7	.707
Industry Groups						
Food and kindred products	----	----	----	----	----	----
Lumber and products, except furniture	0.2	.115	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	----	----	----	----	----	----
Stone, clay, and glass products	0.6	.268	6.9	.392	0.6	.752
Primary metal industries	8.8	.363	----	----	4.5	.513
Fabricated metal products	----	----	----	----	0.1	.440
Transportation equipment	----	----	----	----	0.4	.793
UTAH	365.6	.203	2.8	.245	1,019.4	.460
Metropolitan Area A	72.5	.221	0.4	.245	47.0	.454
All other counties	293.1	.199	2.4	.244	972.4	.461
Industry Groups						
Food and kindred products	142.0	.229	2.4	.254	4.6	.762
Textile mill products	0.4	.352	----	----	----	----
Apparel and related products	0.2	.404	----	----	----	----
Lumber and products, except furniture	0.3	.329	----	----	----	----
Printing and publishing industries§	0.3	.329	0.2	.275	----	----
Chemicals and allied products	12.7	.215	----	----	0.4	.121
Petroleum and coal products	14.1	.205	----	----	----	----
Stone, clay, and glass products	90.0	.169	0.1	.160	5.1	.459
Primary metal industries	103.6	.192	----	----	1,008.9	.459
Fabricated metal products	1.0	.271	----	----	0.3	.608
Machinery (except electrical)	0.5	.206	----	----	0.1	.960
NEVADA	42.8	.296	0.1	.200	7.6	.693
Industry Groups						
Food and kindred products	0.1	.462	----	----	----	----
Lumber and products, except furniture	----	----	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	----	----	----	----	----	----
Stone, clay, and glass products	----	----	0.1	.200	7.6	.693
PACIFIC						
WASHINGTON	455.4	.316	4.4	.419	23.1	.704
Metropolitan Area A	68.0	.319	1.2	.361	4.4	.817
Metropolitan Area B	8.4	.292	0.6	.553	13.1	.650
Metropolitan Area C	----	----	----	----	----	----
Metropolitan Area D	84.8	.275	0.8	.429	1.1	.938
All other counties	294.2	.327	1.8	.409	4.5	.691

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
-----	\$-----	22.0	\$0.177	-----	\$-----	-----	\$-----	1.4	\$4.500
27.9	.449	4,722.5	.116	-----	-----	-----	-----	13.0	5.023
517.2	.428	740.5	.165	-----	-----	11,073.1	.145	39.9	2.375
2.3	.483	109.3	.259	-----	-----	-----	-----	6.6	5.360
5.9	.598	256.1	.195	-----	-----	-----	-----	13.2	4.973
0.1	.833	15.1	.252	-----	-----	-----	-----	0.6	7.000
0.3	.789	23.7	.273	-----	-----	-----	-----	1.4	5.750
0.9	.304	52.6	.254	0.7	1.000	-----	-----	1.3	7.636
46.6	.430	4,612.3	.137	-----	-----	-----	-----	25.8	5.197
3.0	.543	399.9	.195	-----	-----	-----	-----	11.6	5.258
10.2	.511	-----¶	-----¶	-----	-----	-----	-----	3.0	5.569
0.2	.667	30.4	.270	-----	-----	-----	-----	0.9	9.032
29.2	.385	1,954.3	.086	-----	-----	-----	-----	5.0	3.532
-----	-----	516.5	.195	-----	-----	-----	-----	3.9	4.752
0.2	.917	58.0	.186	-----	-----	-----	-----	0.7	6.833
441.0	.468	8,883.0	.200	3.1	2.176	-----	-----	245.7	2.362
9.1	.619	1,032.6	.236	0.6	2.667	-----	-----	83.5	3.042
431.9	.465	7,850.4	.195	2.5	2.071	-----	-----	162.2	2.012
26.3	.439	585.6	.247	0.9	2.000	-----	-----	55.5	3.029
52.4	.691	-----¶	-----¶	-----¶	-----¶	-----	-----	1.8	7.656
0.2	.100	10.1	.274	1.9	2.300	-----	-----	3.1	4.632
3.8	.636	323.9	.241	0.1	1.000	-----	-----	9.2	3.022
14.5	.469	563.2	.239	0.2	3.000	-----	-----	3.3	5.858
342.4	.433	7,340.5	.191	-----	-----	-----	-----	169.3	1.878
-----	-----¶	21.5	.248	-----	-----	-----	-----	1.4	4.625
-----	-----	6.5	.412	-----	-----	-----	-----	0.8	3.963
220.2	.365	9,325.0	.107	58,638.1	.218	-----	-----	150.2	3.333
82.1	.339	7,271.3	.102	-----	-----	-----	-----	72.1	3.408
138.1	.381	2,053.7	.123	58,638.1	.218	-----	-----	78.1	3.264
39.0	.432	935.4	.151	33.0	.237	-----	-----	45.0	3.876
-----	-----	51.3	.154	-----	-----	-----	-----	0.6	5.700
0.5	.548	11.9	.192	-----	-----	-----	-----	0.5	7.706
3.8	.665	19.3‡	.153‡	-----¶	-----¶	-----	-----	0.6	8.500
-----	-----¶	28.7	.193	3.3	.333	-----	-----	4.0	5.875
10.8	.504	49.1	.141	47.3	.231	-----	-----	12.6	2.872
6.3	.348	380.0	.111	28,687.0	.202	-----	-----	12.7	2.570
7.4	.649	1,533.5	.117	-----	-----	-----	-----	31.0	2.780
147.8	.314	6,174.2	.095	29,867.3	.226	-----	-----	37.6	2.777
0.8	.520	65.6	.149	-----	-----	-----	-----	2.7	5.250
1.0	.532	47.0	.154	-----	-----	-----	-----	1.9	5.231
295.8	.426	-----	-----	12.0	1.708	-----	-----	229.2	1.539
13.8	.509	-----	-----	4.0	1.864	-----	-----	6.9	4.340
1.0	1.097	-----	-----	-----¶	-----¶	-----	-----	2.5	4.941
0.1	1.000	-----	-----	1.2	2.333	-----	-----	0.9	6.258
113.0	.424	-----	-----	5.7	1.419	-----	-----	213.7	1.353
162.6	.410	-----	-----	1.1	2.000	-----	-----	5.2	2.966
5,248.9	.323	-----	-----	505.1	1.263	-----	-----	5,421.6	1.007
997.3	.346	-----	-----	327.2	1.284	-----	-----	370.9	2.182
1,150.1	.297	-----	-----	32.9	1.213	-----	-----	501.9	1.212
289.9	.312	-----	-----	7.8	1.119	-----	-----	1,688.6	.660
198.2	.520	-----	-----	39.6	1.364	-----	-----	1,900.6	.727
2,613.4	.312	-----	-----	97.6	1.180	-----	-----	959.6	1.607

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
PACIFIC—continued						
WASHINGTON—continued						
Industry Groups						
Food and kindred products	55.4	\$0.318	3.3	\$0.410	2.5	\$0.466
Textile mill products	0.1	.577	----	----	----	----
Apparel and related products	0.1	.269	----	----	----	----
Lumber and products, except furniture	7.9	.280	----	----	----	----
Furniture and fixtures	0.2	.538	0.1	.560	----	----
Paper and allied products	7.5	.290	----	----	----	----
Printing and publishing industries§	1.1	.323	----	----	----	----
Chemicals and allied products	6.5	.315	----	----	0.2	.660
Stone, clay, and glass products	326.3	.325	0.6	.395	3.4	.855
Primary metal industries	45.2	.245	----	----	15.1	.670
Fabricated metal products	0.2	.481	0.1	.560	0.6	.792
Machinery (except electrical)	2.4	.321	0.2	.431	1.2	1.158
Electrical machinery	----	----	----	----	----	----
Transportation equipment	1.2	.481	0.1	.320	----	----
Miscellaneous manufactures	0.1	.577	----	----	0.1	.560
OREGON	104.8	.338	2.9	.410	27.7	.633
Metropolitan Area A	14.3	.311	0.5	.732	24.2	.606
All other counties	90.5	.343	2.4	.343	3.5	.820
Industry Groups						
Food and kindred products	49.0	.378	0.5	.260	2.8	.879
Textile mill products	6.8	.269	----	----	----	----
Apparel and related products	----	----	----	----	----	----
Lumber and products, except furniture	7.9	.293	0.5‡	.268‡	----	----
Furniture and fixtures	0.1	.308	0.1	.240	----	----
Paper and allied products	----	----	----	----	----	----
Printing and publishing industries§	0.1	.500	----	----	----	----
Chemicals and allied products	0.3	.418	----	----	----	----
Petroleum and coal products	----	----	----	----	----	----
Rubber products	----	----	----	----	----	----
Stone, clay, and glass products	36.2	.302	1.3	.418	----	----
Primary metal industries	3.4	.356	0.3	.947	23.4	.608
Fabricated metal products	0.4	.438	0.1	.360	0.6	.403
Machinery (except electrical)	----	----	----	----	0.9	.664
Electrical machinery	0.1	.500	----	----	----	----
Transportation equipment	0.1	.308	----	----	----	----
Miscellaneous manufactures	0.3	.304	----	----	----	----
CALIFORNIA	14.1	.316	5.0	.286	510.3	.677
Metropolitan Area A	2.7	.289	0.2	.373	75.0	.755
Metropolitan Area B	2.8	.328	----	----	5.4	.646
Metropolitan Area C	0.3	.608	0.1	.440	5.0	.666
Metropolitan Area D	1.3	.364	----	----	2.9	.565
Metropolitan Area E	----	----	----	----	2.7	.321
Metropolitan Area F	2.6	.260	4.5	.249	62.1	.807
Metropolitan Area G	----	----	----	----	0.1	.560
Metropolitan Area H	----	----	----	----	337.6	.635
All other counties	4.4	.319	0.2	.882	19.5	.691
Industry Groups						
Food and kindred products	2.3	.318	0.4	.304	21.4	.655
Textile mill products	0.2	.288	----	----	----	----
Apparel and related products	0.3	.228	----	----	0.1	.680
Lumber and products, except furniture	2.0	.275	----	----	----	----
Furniture and fixtures	0.1	.385	----	----	----	----
Paper and allied products	----	----	----	----	----	----
Printing and publishing industries§	----	----	----	----	----	----
Chemicals and allied products	0.2	.212	----	----	9.1	.911
Petroleum and coal products	----	----	----	----	----	----
Rubber products	----	----	----	----	----	----
Leather and leather products	0.3	.430	----	----	----	----
Stone, clay, and glass products	6.3	.321	0.2	.686	8.8	.894
Primary metal industries	0.3	.633	1.3	.264	448.2	.664

For footnotes, see end of table.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
556.3	\$0.438	----	\$----	191.2	\$1.325	----	\$----	181.8	\$2.715
19.3	.302	----	----	0.6	2.000	----	----	2.4	3.207
6.1	.434	----	----	6.1	1.333	----	----	2.6	5.157
244.0	.394	----	----	2.5‡	1.357‡	----	----	261.6	2.141
8.8	.473	----	----	2.0	1.364	----	----	13.4	2.687
2,357.3	.283	----	----	2.9	1.562	----	----	710.8	1.259
9.2	.442	----	----	31.7	1.439	----	----	12.7	4.540
308.4	.300	----	----	3.8	1.381	----	----	213.8	1.140
208.9	.398	----	----	7.8	1.429	----	----	120.5	1.709
1,272.8	.313	----	----	20.0	1.361	----	----	3,689.8	.673
34.8	.443	----	----	105.2	.963	----	----	18.2	3.738
28.1	.479	----	----	38.2	1.233	----	----	72.7	2.397
4.7	.409	----	----	10.7	1.103	----	----	4.7	2.750
181.7	.339	----	----	73.0	1.391	----	----	111.0	1.665
3.5	.456	----	----	8.0	1.512	----	----	2.9	4.495
1,977.8	.382	----	----	737.2	1.043	----	----	2,197.5	1.236
1,096.1	.341	----	----	653.7	1.027	----	----	1,754.0	.929
881.7	.433	----	----	83.5	1.175	----	----	443.5	2.450
389.0	.382	----	----	329.0	1.080	----	----	108.6	2.970
57.9	.333	----	----	3.3	1.278	----	----	14.5	2.345
6.8	.419	----	----	3.7	1.150	----	----	1.7	5.241
341.1	.507	----	----	1.5‡	1.125‡	----	----	255.1	3.037
18.8	.305	----	----	2.3	1.250	----	----	12.1	2.646
533.9	.301	----	----	5.6	1.200	----	----	247.9	1.130
3.0	.468	----	----	33.4	1.217	----	----	8.7	4.320
63.0	.351	----	----	41.3	1.121	----	----	79.7	1.056
31.3	.362	----	----	14.2	1.117	----	----	3.9	2.624
5.1	.370	----	----	----	----	----	----	1.2	4.049
344.7	.380	----	----	4.4	1.167	----	----	36.0	2.599
103.9	.364	----	----	45.1	1.057	----	----	1,363.0	.638
21.9	.524	----	----	107.8	.945	----	----	18.4	3.030
44.3	.519	----	----	43.9	.941	----	----	11.0	3.344
6.8	.382	----	----	68.9	.812	----	----	4.5	3.403
2.7	.557	----	----	20.1	1.165	----	----	28.4	1.465
2.7	.419	----	----	11.0	1.237	----	----	2.2	4.813
10,803.2	.314	161,633.3	.213	3,463.1	.654	28,790.7	.252	4,954.1	2.583
1,636.9	.289	59,412.8	.204	1,757.4	.526	318.4	.380	1,395.7	2.476
156.9	.408	7,953.1	.253	53.5	1.156	97.1	.283	229.5	2.202
83.5	.329	1,070.6	.276	31.6	1.836	220.2	.309	37.3	3.659
34.6	.374	4,428.1	.244	68.8	.565	239.8	.270	47.5	3.641
93.3	.399	1,011.2	.254	72.8	.567	21.5	.426	59.9	3.373
2,837.7	.297	63,222.5	.208	272.9	1.382	2,232.2	.248	2,205.1	2.574
165.7	.347	380.8	.329	166.2	1.550	80.8	.239	70.6	3.443
3,486.9	.317	532.2	.259	5.1	1.214	25,335.9	.239	331.8	2.026
2,307.7	.334	23,622.0	.224	1,034.8	.483	244.8	.335	576.7	2.999
1,229.6	.342	28,522.3	.259	2,876.4	.520	800.2	.333	779.2	3.124
78.8	.288	848.3	.267	0.5	1.667	9.2	.434	29.3	3.047
3.1	.490	304.6	.275	7.5	1.500	39.2	.475	26.4	6.216
318.1	.523	183.0‡	.242‡	1.4‡	1.875‡	1.7‡	.667‡	135.6	3.940
10.5	.402	210.8	.309	3.5	1.526	10.3	.441	33.1	4.733
251.8	.271	4,889.4	.252	37.7	1.368	398.0	.291	114.5	2.340
12.5	.382	768.2	.287	14.3	1.260	31.0	.445	96.3	4.307
2,300.6	.305	9,841.7	.244	133.6	.746	1,457.1	.171	628.7	1.978
576.9	.229	63,449.0	.141	17.1	.587	13,130.5	.211	791.5	1.780
281.9	.253	2,604.4	.244	4.8	1.923	31.9	.353	202.7	2.119
19.9	.295	127.1	.296	0.4	1.500	1.2	.364	8.7	4.724
4,103.9	.308	28,329.4	.254	29.8	1.652	175.5	.362	645.0	2.147
1,311.5	.308	12,838.5	.260	89.0	1.358	12,264.8	.254	552.8	2.386

**Table 4 - Amounts and Average Costs of Fuels Consumed
Industries, for States by Metropolitan**

METROPOLITAN AREAS and INDUSTRY GROUPS	Bituminous Coal		Anthracite Coal		Coke	
	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.	Thousands of tons	Average Cost per Mil. Btu.
PACIFIC—continued						
CALIFORNIA—continued						
Fabricated metal products	1.2	\$0.293	----	\$----†	16.7	\$0.738
Machinery (except electrical)	0.3	.405	0.1	.480	4.1	.943
Electrical machinery	----	----	0.1	.800	0.3	1.000
Transportation equipment	0.4	.267	----	----†	1.6	.567
Instruments and related products	0.1	.154	2.9	.235	----	----
Miscellaneous manufactures	0.1	.269	----	----	----	----

Note: Due to rounding, some figures do not add to major totals; further, the Bureau of the Census is prohibited by law from publishing any statistics that reveal the operations of individual companies. For this reason the statistics for some industry groups and counties are not shown. They are included, however, in the appropriate State totals.

----Zero or not applicable.

*Amount figures were not available for the "Other fuels" classification contained in the source data. The principal fuels included in this "Other fuels" classification are gasoline, liquefied petroleum gas, and wood. For "Distilled liquors, except brandy," "Lumber and products, except furniture," "Printing and publishing industries," and "Gum naval stores (steam distilled)," include cost of some coal, coke, fuel oil, and gas for which separate figures by type of fuel were not reported.

†Represents mixtures of natural and manufactured gas. Includes all gas reported by establishments that purchase more than one type of gas. Also includes some gas for which the type was not reported.

and Electric Energy Purchased by Manufacturing Areas and Industry Groups, 1947 *

Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Thousands of barrels	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of cubic feet	Average Cost per Mil. Btu.	Millions of kw-h.	Average Cost per Mil. Btu.
56.2	\$0.425	3,051.1	\$0.300	23.3	\$1.833	86.7	\$0.412	185.9	\$3.801
71.8	.520	1,584.3	.312	33.5	1.398	109.7	.390	172.3	3.763
20.7	.432	679.4	.304	14.9	1.638	53.1	.427	75.0	3.328
146.3	.351	3,049.6	.319	163.9	1.553	114.9	.311	436.5	2.587
0.8	.600	93.3	.344	8.3	1.956	27.3	.452	12.3	4.224
5.9	.418	251.8	.345	3.2	1.588	48.2	.421	27.1	4.268

‡Figures for cost of anthracite, coke, and gas for industry groups 242 and 244, and for industry 2432, are included under "Other fuels." Quantity figures for these items are not available.

§In the basic data, figures shown for coal, coke, fuel oil, and gas represent only establishments for which long-form reports were obtained. A single figure for "All fuels" was collected on short forms used in the "Printing and publishing industries." This total is included under "Other fuels."

||Less than 50.

†Not available.

**Figures for Genesee County, Michigan; Blount County, Tennessee; Fayette County, West Virginia; and Jefferson County, Colorado, were not published in order to avoid approximate disclosure of data for individual companies. The figures for Fairfax County, Virginia, were not published since they were extremely small.

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
NEW ENGLAND								
MAINE	\$ 23,641.7	43,117.7	100.00	100.00	49.37	66.15	.15	.16
Metropolitan Area A	2,485.7	4,287.9	100.00	100.00	53.27	73.57	.29	.35
All other counties	21,156.0	38,830.0	100.00	100.00	48.91	65.33	.14	.14
Industry Groups								
Food and kindred products	1,308.8	1,761.9	100.00	100.00	34.48	53.39	1.32	1.73
Textile mill products	3,637.3	5,627.5	100.00	100.00	29.25	45.63	.02	----
Apparel and related products	362.0	682.5	100.00	100.00	65.97	92.51	.66	.37
Lumber and products, except furniture	674.4	384.1	100.00	100.00	3.07	17.05	.21‡	.65‡
Furniture and fixtures	39.9	40.8	100.00	100.00	24.81	76.96	.25	----
Paper and allied products	14,786.2	30,724.5	100.00	100.00	61.23	72.18	----	----
Printing and publishing industries§	105.2	72.9	100.00	100.00	8.75	28.81	.19	----
Chemicals and allied products	203.5	297.6	100.00	100.00	29.19	44.89	----	----
Rubber products	19.8	18.0	100.00	100.00	----	----	----	----
Leather and leather products	575.7	680.4	100.00	100.00	19.18	38.51	.43	.75
Stone, clay, and glass products	665.4	1,387.5	100.00	100.00	70.51	93.10	.06	----
Primary metal industries	73.3	64.0	100.00	100.00	4.64	12.34	3.27	7.97
Fabricated metal products	341.9	452.1	100.00	100.00	13.72	19.71	1.73	2.81
Machinery (except electrical)	464.5	439.8	100.00	100.00	5.10	10.12	.24	.57
Transportation equipment	322.5	401.1	100.00	100.00	25.95	49.64	.19	.62
Miscellaneous manufactures	58.5	81.3	100.00	100.00	47.01	74.17	2.39	9.35
NEW HAMPSHIRE	11,571.3	19,265.4	100.00	100.00	36.67	56.98	7.23	13.49
Metropolitan Area A	3,501.3	4,289.4	100.00	100.00	18.26	39.03	.25	.35
All other counties	8,070.0	14,976.1	100.00	100.00	44.66	62.12	10.26	17.25
Industry Groups								
Food and kindred products	306.2	365.4	100.00	100.00	22.08	43.73	.65	2.08
Textile mill products	3,635.8	5,170.5	100.00	100.00	17.89	32.53	.60	.98
Apparel and related products	79.4	73.0	100.00	100.00	8.44	21.51	.13	----
Lumber and products, except furniture	405.0	250.3	100.00	100.00	6.77	30.36	.32‡	2.04‡
Furniture and fixtures	96.7	63.5	100.00	100.00	13.24	53.70	.52	----
Paper and allied products	4,390.1	10,054.9	100.00	100.00	60.14	68.03	17.30	24.05
Printing and publishing industries§	114.4	64.3	100.00	100.00	3.06	12.29	.35	----
Chemicals and allied products	47.2	73.3	100.00	100.00	55.30	89.36	----	----
Leather and leather products	1,133.7	1,602.3	100.00	100.00	39.49	76.85	1.57	2.53
Stone, clay, and glass products	409.4	592.0	100.00	100.00	39.15	62.40	2.44	3.43
Primary metal industries	127.2	214.7	100.00	100.00	29.25	47.60	2.99	7.08
Fabricated metal products	142.2	105.2	100.00	100.00	10.90	37.36	3.02	4.85
Machinery (except electrical)	433.8	405.5	100.00	100.00	20.31	54.92	1.08	2.52
Electrical machinery	55.2	45.1	100.00	100.00	6.16	17.52	14.49	45.01
Instruments and related products	20.1	18.0	100.00	100.00	4.98	14.44	.50	----
Miscellaneous manufactures	92.7	97.6	100.00	100.00	38.73	80.53	2.48	5.23
VERMONT	5,351.3	7,309.4	100.00	100.00	31.10	61.54	4.50	9.38
Industry Groups								
Food and kindred products	409.7	544.2	100.00	100.00	30.12	60.18	6.22	11.21
Textile mill products	829.7	1,550.0	100.00	100.00	59.55	89.08	3.97	5.41
Apparel and related products	27.7	19.6	100.00	100.00	7.58	26.53	8.66	26.02
Lumber and products, except furniture	449.4	347.1	100.00	100.00	9.01	36.99	.24‡	.72‡
Furniture and fixtures	117.1	137.0	100.00	100.00	32.19	80.29	1.02	1.82
Paper and allied products	1,116.9	2,119.9	100.00	100.00	52.56	72.42	12.86	20.85
Printing and publishing industries§	50.9	21.9	100.00	100.00	5.50	36.07	4.13	11.42
Chemicals and allied products	187.7	291.3	100.00	100.00	15.93	26.09	.96	.86
Leather and leather products	48.0	76.7	100.00	100.00	57.29	92.18	----	----
Stone, clay, and glass products	689.4	678.9	100.00	100.00	13.98	35.90	3.23	10.10
Primary metal industries	136.2	153.0	100.00	100.00	3.82	10.26	----	----
Fabricated metal products	94.5	115.9	100.00	100.00	21.69	52.03	4.13	4.40
Machinery (except electrical)	713.2	736.0	100.00	100.00	17.20	44.85	.13	.34
Miscellaneous manufactures	122.7	153.3	100.00	100.00	35.37	78.60	2.20	1.63
MASSACHUSETTS	103,362.8	151,563.4	100.00	100.00	22.16	42.22	.59	1.01
Metropolitan Area A	13,049.0	18,006.5	100.00	100.00	27.39	59.10	1.66	3.12
Metropolitan Area B	17,845.2	25,567.3	100.00	100.00	20.96	39.99	.40	.62

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.70	.62	20.92	26.43	----	----	.81	.33	----	----	28.04	6.29
1.11	.98	14.04	18.13	----	----	5.44	2.56	----	----	25.85	4.40
.65	.58	21.73	27.35	----	----	.27	.09	----	----	28.30	6.50
.64	.70	24.37	35.19	----	----	8.23	4.82	----	----	30.95	4.17
----	----	30.13	45.92	----	----	.05	.02	----	----	40.55	8.43
----	----	3.98	1.64	----	----	1.33	.42	----	----	28.07	5.05
----	----	18.94	54.23	----	----	----	----	----	----	77.79	28.07
----	----	4.26	7.60	----	----	.75	.49	----	----	69.92	14.95
----	----	19.32	22.33	----	----	.01	----	----	----	19.45	5.49
----	----	17.40	45.13	----	----	11.22	9.74	----	----	62.45	16.32
----	----	26.83	47.28	----	----	.05	.03	----	----	43.93	7.80
----	----	32.83	82.78	----	----	----	----	----	----	67.17	17.22
1.18	1.82	28.10	49.29	----	----	.47	.21	----	----	50.63	9.42
.20	.18	1.38	.98	----	----	.06	.01	----	----	27.79	5.73
2.78	34.84	10.91	21.25	----	----	12.55	11.88	----	----	45.84	11.72
6.08	7.12	38.99	58.97	----	----	10.27	6.26	----	----	29.22	5.13
23.75	41.72	13.22	28.63	----	----	2.73	1.66	----	----	54.96	17.30
.47	.62	22.08	39.27	----	----	1.02	.57	----	----	50.29	9.27
.17	----	11.79	11.44	----	----	.85	.37	----	----	37.78	4.67
1.98	1.97	16.69	21.99	----	----	1.23	.44	----	----	36.20	5.13
1.60	2.14	24.39	46.76	----	----	2.02	1.01	----	----	53.48	10.71
2.14	1.92	13.34	14.89	----	----	.89	.28	----	----	28.71	3.54
.29	.63	32.14	45.65	----	----	4.38	1.89	----	----	40.46	5.97
3.62	4.51	32.59	53.65	----	----	.28	.12	----	----	45.01	8.21
----	----	31.99	64.52	----	----	.38	.27	----	----	59.07	13.70
.15‡	----	14.96	43.59	----	----	----	----	----	----	77.80	24.01
.83	----	8.38	25.35	----	----	1.96	1.57	----	----	75.08	19.37
----	----	5.66	5.49	----	----	.79	.23	----	----	16.11	2.20
.79	----	17.48	54.90	----	----	12.67	11.66	----	----	65.65	21.15
----	----	6.99	6.82	----	----	.64	.14	----	----	37.08	3.68
.05	----	9.89	14.20	----	----	1.07	.39	----	----	47.93	6.03
8.70	8.80	15.75	19.80	----	----	1.22	.51	----	----	32.73	5.07
36.08	33.49	9.91	8.66	----	----	3.77	1.26	----	----	18.00	1.91
1.41	4.75	14.98	33.56	----	----	6.40	4.56	----	----	63.29	14.92
2.19	3.67	11.94	24.32	----	----	2.51	1.36	----	----	61.96	13.22
----	----	9.06	20.62	----	----	7.25	4.66	----	----	63.04	12.20
----	----	30.35	68.89	----	----	13.93	7.22	----	----	50.25	9.44
----	----	3.67	5.12	----	----	2.37	1.13	----	----	52.75	7.99
2.90	3.12	13.96	17.58	----	----	1.07	.42	----	----	46.48	7.95
.05	----	17.40	21.43	----	----	1.93	.85	----	----	44.28	6.34
.31	.32	1.05	.96	----	----	.02	.01	----	----	35.10	4.23
----	----	16.61	31.63	----	----	5.05	3.57	----	----	62.09	12.24
----	----	19.18	46.27	----	----	----	----	----	----	71.56	16.02
.17	----	5.29	5.91	----	----	----	----	----	----	61.32	11.97
----	----	.44	.47	----	----	.01	----	----	----	34.14	6.26
1.57	----	3.14	11.42	----	----	12.97	15.98	----	----	72.69	25.11
.37	.86	58.39	68.97	----	----	.21	.07	----	----	24.13	3.16
----	----	2.71	2.48	----	----	----	----	----	----	40.00	5.35
1.42	2.56	20.90	38.81	----	----	1.60	.81	----	----	58.86	11.81
47.28	61.57	18.43	22.68	----	----	.29	.13	----	----	30.18	5.36
1.69	2.16	26.14	33.13	----	----	1.48	.60	----	----	44.87	7.68
10.47	14.16	15.23	26.37	----	----	2.97	1.48	----	----	54.00	12.80
----	----	8.56	10.50	----	----	.98	.39	----	----	52.89	8.87
4.03	4.58	27.60	43.38	----	----	3.38	2.56	----	----	42.24	6.25
1.62	1.68	17.89	26.11	----	----	3.28	1.48	----	----	48.17	8.51
2.18	2.12	31.63	48.58	----	----	5.09	2.83	----	----	39.75	5.86

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
NEW ENGLAND—continued								
MASSACHUSETTS—continued								
Metropolitan Area C	\$50,777.9	78,749.4	100.00	100.00	20.67	35.92	.47	.78
Metropolitan Area D	1,702.4	2,007.6	100.00	100.00	12.29	27.80	1.69	3.67
Metropolitan Area E	11,366.3	13,242.2	100.00	100.00	16.02	35.04	.33	.65
All other counties	8,622.0	13,990.4	100.00	100.00	35.53	68.90	.18	.31
Industry Groups								
Food and kindred products	8,017.2	11,328.9	100.00	100.00	14.32	25.92	.97	1.32
Tobacco manufactures	31.5	43.6	100.00	100.00	4.76	5.96	2.86	5.73
Textile mill products	23,429.8	36,937.1	100.00	100.00	25.46	43.69	.26	.50
Apparel and related products	1,263.8	1,022.3	100.00	100.00	9.56	33.06	.44	1.00
Lumber and products, except furniture	580.5	437.6	100.00	100.00	10.18	36.52	.48†	1.17†
Furniture and fixtures	763.5	822.4	100.00	100.00	30.15	69.13	1.38	4.01
Paper and allied products	12,697.4	24,328.9	100.00	100.00	44.23	71.10	1.45	2.06
Printing and publishing industries§	1,577.1	864.1	100.00	100.00	3.82	16.38	.63	1.76
Chemicals and allied products	5,745.0	9,932.0	100.00	100.00	28.58	44.24	.28	.61
Petroleum and coal products	1,132.6	2,716.0	100.00	100.00	17.63	21.41	.01	----
Rubber products	4,920.1	6,411.2	100.00	100.00	27.18	57.05	.05	.08
Leather and leather products	4,400.4	6,254.5	100.00	100.00	35.62	67.11	.58	1.14
Stone, clay, and glass products	2,506.0	4,209.2	100.00	100.00	25.57	43.01	1.62	2.05
Primary metal industries	9,963.9	14,551.4	100.00	100.00	6.49	12.30	.75	1.31
Fabricated metal products	5,000.0	4,950.7	100.00	100.00	8.92	25.83	.47	.98
Machinery (except electrical)	9,029.8	12,532.9	100.00	100.00	16.30	31.55	.52	.79
Electrical machinery	5,798.5	6,866.0	100.00	100.00	19.20	44.07	.11	.18
Transportation equipment	2,063.5	2,504.3	100.00	100.00	6.34	15.83	.40	1.01
Instruments and related products	951.0	1,279.9	100.00	100.00	15.20	30.30	.38	.99
Miscellaneous manufactures	3,491.2	3,597.5	100.00	100.00	10.37	26.65	.27	.64
RHODE ISLAND								
Metropolitan Area A	21,802.4	30,253.2	100.00	100.00	12.79	23.68	.61	1.08
All other counties	20,783.8	28,190.4	100.00	100.00	12.26	23.04	.62	1.14
Industry Groups								
Food and kindred products	889.9	1,126.7	100.00	100.00	3.69	9.30	.73	1.58
Textile mill products	11,689.0	17,769.1	100.00	100.00	15.50	27.13	.66	1.01
Apparel and related products	88.2	59.8	100.00	100.00	1.81	4.35	.34	----
Lumber and products, except furniture	47.9	40.5	100.00	100.00	29.85	84.20	----†	----†
Furniture and fixtures	50.8	52.8	100.00	100.00	9.25	19.89	.59	----
Paper and allied products	922.3	1,348.5	100.00	100.00	42.85	58.87	.89	2.45
Printing and publishing industries§	185.1	124.2	100.00	100.00	3.40	12.64	.43	2.01
Chemicals and allied products	652.7	934.4	100.00	100.00	13.94	25.24	.17	.27
Petroleum and coal products	348.6	942.7	100.00	100.00	8.84	16.68	.09	.27
Rubber products	999.6	1,194.9	100.00	100.00	2.73	5.92	----	----
Stone, clay, and glass products	476.0	814.2	100.00	100.00	1.76	2.58	.10	.31
Primary metal industries	1,629.2	2,506.9	100.00	100.00	3.72	7.73	.30	.20
Fabricated metal products	797.3	781.5	100.00	100.00	12.48	31.52	.49	.97
Machinery (except electrical)	1,384.2	1,263.6	100.00	100.00	11.17	25.09	1.36	3.42
Electrical machinery	572.3	403.4	100.00	100.00	2.83	12.35	1.17	4.41
Instruments and related products	74.0	38.5	100.00	100.00	1.49	6.75	----	----
Miscellaneous manufactures	968.2	827.3	100.00	100.00	3.18	10.13	.33	1.23
CONNECTICUT								
Metropolitan Area A	53,918.6	76,832.3	100.00	100.00	21.52	42.93	1.22	2.62
Metropolitan Area B	13,072.6	18,198.4	100.00	100.00	17.36	35.44	1.79	4.06
Metropolitan Area C	17,421.0	24,945.0	100.00	100.00	24.08	47.62	.98	2.09
All other counties	12,888.6	16,090.3	100.00	100.00	13.74	32.97	.76	1.52
Industry Groups								
Food and kindred products	1,480.2	1,777.7	100.00	100.00	4.27	11.20	4.78	16.29
Textile mill products	7,143.3	13,691.1	100.00	100.00	33.59	48.20	2.17	4.17
Apparel and related products	392.1	349.0	100.00	100.00	13.85	43.55	.61	1.46
Lumber and products, except furniture	105.5	130.4	100.00	100.00	23.51	72.32	.57†	1.92†
Furniture and fixtures	163.5	139.6	100.00	100.00	7.52	33.81	.92	3.65
Paper and allied products	2,888.3	6,271.6	100.00	100.00	54.92	70.77	.03	.04
Printing and publishing industries§	688.2	479.0	100.00	100.00	2.57	10.94	3.40	12.19
Chemicals and allied products	2,643.9	3,688.3	100.00	100.00	30.85	57.40	.72	1.86
Rubber products	1,713.3	1,998.4	100.00	100.00	8.76	19.93	----	----

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
6.34	7.12	31.17	48.05	----	----	3.17	3.16	----	----	38.16	4.99
5.57	6.30	30.92	53.46	----	----	3.39	2.04	----	----	46.13	6.73
1.40	1.76	23.90	49.25	----	----	2.93	2.00	----	----	55.42	11.30
1.06	.96	17.16	22.78	----	----	1.78	.71	----	----	44.30	6.35
1.70	2.25	37.17	61.44	----	----	6.67	3.26	----	----	39.17	5.79
----	----	47.62	82.57	----	----	.32	.23	----	----	44.44	5.50
.10	.11	31.73	49.34	----	----	.27	.11	----	----	42.17	6.26
.31	.72	19.63	53.01	----	----	3.58	2.66	----	----	66.49	9.55
.17‡	----	21.03	50.57	----	----	.62‡	.43‡	----	----	67.51	11.31
1.15	1.81	9.94	17.41	----	----	1.44	.79	----	----	55.94	6.85
.05	.05	19.30	22.38	----	----	.21	.06	----	----	34.75	4.35
.36	3.45	14.20	50.01	----	----	7.93	9.34	----	----	73.06	19.07
.11	.07	33.62	49.18	----	----	1.30	.56	----	----	36.11	5.34
.01	----	20.69	19.88	----	----	12.20	53.29	----	----	49.46	5.42
.04	.04	17.09	30.98	----	----	.52	.27	----	----	55.11	11.59
.05	.20	18.23	26.26	----	----	1.47	.74	----	----	44.05	4.56
3.82	3.83	35.87	46.50	----	----	2.61	1.10	----	----	30.51	3.51
33.49	38.76	28.42	40.29	----	----	6.52	3.71	----	----	24.32	3.63
2.97	4.41	29.62	53.01	----	----	8.74	6.43	----	----	49.28	9.35
4.04	4.02	31.49	55.11	----	----	4.78	2.36	----	----	42.87	6.18
.15	.18	19.31	39.68	----	----	7.91	5.20	----	----	53.32	10.68
.06	.10	34.48	71.38	----	----	2.25	1.23	----	----	56.47	10.45
.07	----	32.01	57.36	----	----	9.01	4.48	----	----	43.32	6.88
.35	.69	28.05	57.99	----	----	5.83	3.48	----	----	55.14	10.55
1.17	1.19	36.45	65.71	----	----	3.21	1.67	----	----	45.77	6.67
1.17	1.21	35.69	65.85	----	----	3.24	1.72	----	----	47.02	7.04
.01	----	52.55	64.33	----	----	2.61	.97	----	----	20.63	1.67
.90	1.32	42.34	77.64	----	----	7.29	3.91	----	----	45.05	6.24
----	----	39.07	65.43	----	----	.75	.34	----	----	44.00	6.08
----	----	25.85	78.76	----	----	3.85	3.18	----	----	68.14	13.71
.42‡	----	3.13	6.17	----	----	.21‡	.25‡	----	----	66.39	9.38
----	----	37.80	72.73	----	----	2.95	1.52	----	----	49.41	5.87
----	----	19.58	32.04	----	----	.66	.31	----	----	36.02	6.33
----	----	19.94	62.40	----	----	9.56	9.18	----	----	66.67	13.77
.02	----	37.09	65.62	----	----	2.14	.91	----	----	46.64	7.96
.92	.78	84.28	81.88	----	----	.20	.03	----	----	5.68	.36
1.17	1.46	38.66	81.67	----	----	1.08	.59	----	----	56.36	10.37
.06	----	56.32	81.79	----	----	17.56	12.06	----	----	24.18	3.27
3.98	3.46	47.51	80.15	----	----	5.73	2.88	----	----	38.77	5.57
1.24	2.23	23.22	51.09	----	----	7.50	4.76	----	----	55.07	9.43
11.15	16.48	15.50	39.06	----	----	6.70	4.83	----	----	54.13	11.13
----	----	16.84	57.02	----	----	4.46	3.99	----	----	74.70	22.24
----	----	15.95	61.30	----	----	14.19	14.29	----	----	68.38	17.66
.21	.60	26.99	70.45	----	----	13.03	9.05	----	----	56.26	8.53
1.91	1.90	27.22	42.32	----	----	5.50	3.73	----	----	42.63	6.51
2.08	2.08	29.92	48.35	----	----	5.75	3.18	----	----	43.10	6.88
1.89	1.87	22.63	35.16	----	----	7.65	6.40	----	----	42.76	6.86
2.31	2.48	29.26	51.03	----	----	4.96	3.23	----	----	48.98	8.77
1.25	1.23	28.95	38.27	----	----	2.32	.97	----	----	34.09	3.54
1.01	1.54	36.22	59.92	----	----	6.48	3.82	----	----	47.24	7.23
.05	.04	36.68	44.79	----	----	.59	.22	----	----	26.92	2.58
----	----	20.48	43.35	----	----	5.84	4.10	----	----	59.22	7.54
----	----	14.60	19.94	----	----	.19‡	.08‡	----	----	61.14	5.75
----	----	20.98	40.83	----	----	11.38	9.96	----	----	59.20	11.75
----	----	25.57	27.09	----	----	.35	.11	----	----	19.13	2.00
.01	----	17.09	48.79	----	----	14.41	14.97	----	----	62.51	13.11
.01	----	19.12	30.63	----	----	1.27	.69	----	----	48.03	9.43
----	----	31.46	66.30	----	----	.49	.29	----	----	59.29	13.49

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, For States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
NEW ENGLAND—continued								
CONNECTICUT—continued								
Leather and leather products	\$ 81.9	87.4	100.00	100.00	8.91	20.94	5.49	5.84
Stone, clay, and glass products	1,385.7	2,074.5	100.00	100.00	13.62	27.66	3.45	5.63
Primary metal industries	12,500.3	18,776.1	100.00	100.00	21.33	42.49	.53	.72
Fabricated metal products	5,999.7	8,006.4	100.00	100.00	19.62	43.33	1.65	2.73
Machinery (except electrical)	6,975.4	6,853.3	100.00	100.00	9.39	25.58	.27	.78
Electrical machinery	2,429.4	3,325.2	100.00	100.00	26.49	55.70	.84	1.37
Transportation equipment	2,529.8	2,596.7	100.00	100.00	5.41	16.75	.17	.20
Instruments and related products	897.1	1,064.3	100.00	100.00	19.28	46.03	1.79	3.34
Miscellaneous manufactures	3,636.7	5,133.6	100.00	100.00	21.40	41.13	2.85	7.57
MIDDLE ATLANTIC								
NEW YORK	271,292.4	488,649.4	100.00	100.00	21.42	42.70	2.97	5.87
Metropolitan Area A	104,156.3	210,111.3	100.00	100.00	11.24	22.08	1.05	1.72
Metropolitan Area B	9,878.0	18,597.1	100.00	100.00	41.06	78.81	1.37	2.28
Metropolitan Area C	13,483.0	32,197.8	100.00	100.00	50.92	74.46	2.33	4.09
Metropolitan Area D	7,062.5	11,938.6	100.00	100.00	33.87	69.85	2.27	5.23
Metropolitan Area E	3,131.2	5,747.4	100.00	100.00	37.51	74.26	3.01	7.47
Metropolitan Area F	12,284.4	23,429.6	100.00	100.00	31.46	54.59	2.33	3.94
Metropolitan Area G	70,041.2	74,491.0	100.00	100.00	11.23	34.82	3.54	11.13
All other counties	51,255.8	112,136.5	100.00	100.00	39.36	64.46	6.68	11.64
Industry Groups								
Food and kindred products	25,231.7	42,585.7	100.00	100.00	25.68	52.75	5.42	9.60
Tobacco manufactures	88.3	75.2	100.00	100.00	21.86	59.18	8.61	20.21
Textile mill products	10,486.0	20,829.2	100.00	100.00	41.78	73.82	1.92	3.96
Apparel and related products	11,277.5	6,335.8	100.00	100.00	7.32	45.74	3.60	21.97
Lumber and products, except furniture	1,142.7	1,302.2	100.00	100.00	19.05	62.77	1.41	2.93
Furniture and fixtures	2,654.0	3,841.8	100.00	100.00	27.73	74.13	1.42	2.58
Paper and allied products	20,872.7	49,166.1	100.00	100.00	42.78	61.91	15.52	27.09
Printing and publishing industries§	6,503.6	3,097.8	100.00	100.00	3.45	25.37	1.90	10.08
Chemicals and allied products	28,417.2	66,318.2	100.00	100.00	47.26	73.46	1.16	1.72
Petroleum and coal products	2,660.6	5,535.3	100.00	100.00	36.17	69.91	2.66	4.45
Rubber products	1,705.4	3,353.6	100.00	100.00	37.93	74.45	3.06	7.50
Leather and leather products	3,004.0	5,049.2	100.00	100.00	38.79	81.67	1.45	2.67
Stone, clay, and glass products	17,770.4	40,039.3	100.00	100.00	37.60	63.87	1.87	2.81
Primary metal industries	90,336.8	174,489.3	100.00	100.00	4.25	7.82	.59	.96
Fabricated metal products	9,310.3	9,808.4	100.00	100.00	8.77	28.61	1.84	4.66
Machinery (except electrical)	10,777.4	15,790.7	100.00	100.00	23.74	58.92	3.28	6.26
Electrical machinery	9,790.6	14,531.5	100.00	100.00	19.70	47.02	4.14	9.04
Transportation equipment	8,411.9	12,566.1	100.00	100.00	19.89	51.27	.65	.91
Instruments and related products	4,764.9	7,143.6	100.00	100.00	29.55	70.42	2.15	5.55
Miscellaneous manufactures	6,086.4	6,790.5	100.00	100.00	19.34	61.12	3.44	11.11
NEW JERSEY	121,698.3	223,713.9	100.00	100.00	15.51	29.20	8.07	18.18
Metropolitan Area A	1,819.7	3,183.4	100.00	100.00	7.75	14.65	17.72	51.70
Metropolitan Area B	89,145.0	162,569.1	100.00	100.00	14.27	26.87	8.88	19.54
Metropolitan Area C	6,902.4	12,662.6	100.00	100.00	23.57	45.75	7.65	17.99
Metropolitan Area D	11,505.2	23,113.4	100.00	100.00	25.58	44.29	3.90	7.37
Metropolitan Area E	433.4	544.1	100.00	100.00	23.35	58.26	1.11	1.87
Metropolitan Area F	3,377.7	4,826.1	100.00	100.00	3.88	9.77	1.08	2.47
All other counties	8,514.9	16,815.1	100.00	100.00	14.33	25.93	6.69	18.78
Industry Groups								
Food and kindred products	9,025.4	13,915.3	100.00	100.00	16.47	33.46	2.08	3.41
Tobacco manufactures	287.7	468.0	100.00	100.00	26.03	50.94	11.33	27.67
Textile mill products	13,716.5	28,171.8	100.00	100.00	16.77	28.29	7.37	14.05
Apparel and related products	1,957.3	1,448.3	100.00	100.00	2.79	13.21	3.89	17.19
Lumber and products, except furniture	439.5	697.1	100.00	100.00	34.02	84.56	1.18	1.82
Furniture and fixtures	503.7	488.2	100.00	100.00	9.21	30.58	2.30	5.71
Paper and allied products	9,364.2	23,375.3	100.00	100.00	15.15	22.26	29.53	50.51
Printing and publishing industries§	1,222.9	910.3	100.00	100.00	4.06	16.70	2.14	6.70
Chemicals and allied products	24,323.8	54,665.4	100.00	100.00	19.79	31.22	12.29	24.82
Petroleum and coal products	3,368.4	7,507.0	100.00	100.00	18.34	26.18	.19	.34
Rubber products	3,276.0	5,752.7	100.00	100.00	19.72	39.81	16.29	40.14

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
----	----	35.16	68.08	----	----	.12	.11	----	----	50.31	5.03
.06	----	44.06	60.73	----	----	2.40	1.18	----	----	36.41	4.80
4.45	4.04	25.71	38.46	----	----	9.64	8.01	----	----	38.34	6.28
2.31	2.51	26.97	40.57	----	----	8.16	4.89	----	----	41.28	5.98
3.96	5.97	23.28	50.63	----	----	5.89	4.66	----	----	57.22	12.39
.35	.37	20.44	32.57	----	----	5.91	3.19	----	----	45.97	6.78
.56	.86	28.24	64.44	----	----	3.17	2.48	----	----	62.45	15.27
----	----	23.64	39.43	----	----	6.11	3.75	----	----	49.17	7.44
.50	.48	24.84	41.10	----	----	6.00	3.49	----	----	44.41	6.22
18.30	21.86	14.38	15.60	.77	.80	4.43	4.45	.72	.64	37.01	8.08
41.59	45.40	13.92	12.99	.39	.40	5.53	7.69	.70	.62	25.59	9.09
2.36	1.95	6.96	5.96	1.26	1.14	5.42	3.46	1.64	1.25	39.93	5.15
11.39	9.27	5.33	4.09	2.06	1.67	.40	.11	5.72	3.62	21.34	2.70
2.76	2.33	6.68	6.66	.24	.33	7.95	5.85	.34	.25	45.89	9.49
.71	.56	9.20	8.84	.35	.32	.40	.16	1.05	.74	47.77	7.66
19.60	20.62	12.80	13.51	----	----	2.55	1.31	----	----	31.25	6.03
1.23	1.77	19.64	38.57	.03	.04	6.40	4.95	.04	.05	57.89	8.67
2.11	1.46	13.71	11.85	2.42	2.01	.58	.19	.38	.26	34.76	8.13
.56	.56	21.22	26.38	.70	.71	5.23	2.83	1.23	1.15	39.96	6.03
----	----	5.66	9.84	----	----	4.19	3.46	----	----	59.68	7.31
.07	.06	14.68	16.42	.14	.14	1.66	.57	.06	.05	39.70	4.98
.12	.51	4.73	12.65	.02	.09	4.35	4.55	.18	.43	79.68	14.07
.21	.19	15.63	23.42	.65	.68	.38	.18	.14	.18	62.54	9.65
.58	1.10	8.08	9.59	.29	.39	2.62	1.49	1.83	2.68	57.45	8.05
.01	.01	4.58	4.06	.06	.05	.53	.19	----	----	36.52	6.70
.26	.96	6.08	23.22	.45	1.50	7.76	11.74	.14	.36	79.96	26.77
5.45	4.94	11.40	10.46	.11	.08	.81	.27	.18	.15	33.63	8.91
.26	.58	17.34	15.17	.27	.29	1.57	1.48	----	----	41.73	8.12
----	----	5.98	6.08	.83	.73	.55	.21	.12	.09	51.54	10.94
.36	.64	6.65	8.69	.06	.06	1.55	.61	.01	----	51.13	5.66
.41	.31	26.57	23.21	4.72	3.79	1.51	.59	.28	.23	27.03	5.20
50.22	56.78	16.15	15.74	.34	.38	6.72	9.42	.78	.67	20.97	8.24
7.46	10.72	19.70	34.30	1.57	3.01	7.78	6.63	1.54	2.13	51.34	9.94
6.10	6.22	10.49	12.82	2.29	2.77	3.10	1.76	2.72	2.54	48.28	8.72
9.35	11.14	11.36	13.59	.84	1.04	5.07	3.59	.51	.52	49.03	14.05
2.06	1.89	20.72	28.04	1.82	2.46	2.94	2.33	2.50	2.65	49.42	10.44
.22	.24	4.38	5.96	.27	.28	9.84	8.29	.82	1.05	52.76	8.21
.09	.26	8.30	12.91	.10	.14	6.53	4.56	.10	.11	62.10	9.79
2.97	2.68	33.30	42.91	----	----	4.13	1.90	----	----	36.01	5.13
10.95	8.96	17.68	17.74	----	----	.86	.34	----	----	45.05	6.60
2.75	2.56	33.89	44.08	----	----	4.56	2.10	----	----	35.66	4.84
3.36	2.86	20.97	24.63	----	----	6.97	3.33	----	----	37.49	5.44
5.18	4.22	30.48	38.68	----	----	1.52	.61	----	----	33.34	4.83
.28	1.36	22.34	30.20	----	----	5.84	2.59	----	----	47.09	5.72
.03	.05	39.30	70.68	----	----	.18	.07	----	----	55.52	16.95
1.57	1.16	42.46	48.38	----	----	3.09	1.41	----	----	31.87	4.34
.65	.77	34.63	52.43	----	----	6.76	3.80	----	----	39.41	6.13
----	----	11.30	15.36	----	----	1.49	.62	----	----	49.84	5.41
.35	.30	48.93	54.06	----	----	2.70	1.05	----	----	23.87	2.25
.24	.51	25.02	57.23	----	----	3.37	2.74	----	----	64.69	9.12
.09	----	8.46	9.07	----	----	.55	.19	----	----	55.70	4.36
.08	----	24.26	47.75	----	----	10.03	7.01	----	----	54.12	8.95
.34	.62	23.33	22.82	----	----	.33	.11	----	----	31.31	3.69
.14	.55	17.58	52.31	----	----	9.97	9.57	----	----	66.11	14.17
.52	.41	33.84	38.35	----	----	1.02	.34	----	----	32.53	4.86
.68	1.45	58.72	68.93	----	----	1.16	.40	----	----	20.92	2.70
.06	.04	7.62	10.07	----	----	1.32	.62	----	----	55.00	9.32

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
MIDDLE ATLANTIC—continued								
NEW JERSEY—continued								
Leather and leather products	\$ 802.3	1,199.7	100.00	100.00	29.90	62.02	2.09	3.81
Stone, clay, and glass products	10,881.5	21,072.4	100.00	100.00	14.59	26.63	2.94	5.56
Primary metal industries	16,078.3	30,120.6	100.00	100.00	14.28	26.92	4.16	7.75
Fabricated metal products	5,102.7	6,072.2	100.00	100.00	11.66	34.09	1.29	3.26
Machinery (except electrical)	5,862.1	7,291.6	100.00	100.00	11.53	31.26	6.75	20.83
Electrical machinery	6,176.3	8,059.9	100.00	100.00	8.46	20.74	8.81	27.54
Transportation equipment	4,579.0	6,609.1	100.00	100.00	16.29	39.05	1.74	4.53
Instruments and related products	1,202.6	1,241.7	100.00	100.00	1.14	4.01	2.14	4.91
Miscellaneous manufactures	3,528.1	4,647.3	100.00	100.00	15.45	37.32	1.78	4.54
PENNSYLVANIA	507,192.7	1,304,989.8	100.00	100.00	17.76	32.25	2.53	4.72
Metropolitan Area A	10,627.6	22,888.6	100.00	100.00	29.37	59.34	.56	1.03
Metropolitan Area B	17,396.5	36,346.2	100.00	100.00	6.41	15.35	.01	.02
Metropolitan Area C	1,763.0	3,221.5	100.00	100.00	4.46	11.22	31.91	76.48
Metropolitan Area D	236,614.9	666,794.3	100.00	100.00	12.50	24.54	.27	.34
Metropolitan Area E	22,056.1	62,482.0	100.00	100.00	2.41	4.74	.02	.02
Metropolitan Area F	2,666.1	9,443.5	100.00	100.00	73.68	92.16	.15	.13
Metropolitan Area G	2,795.4	5,282.7	100.00	100.00	5.82	13.99	29.90	72.32
Metropolitan Area H	14,978.0	38,682.0	100.00	100.00	12.33	17.84	1.82	5.49
Metropolitan Area J	5,985.2	11,962.5	100.00	100.00	37.62	70.83	3.60	7.90
Metropolitan Area K	4,633.8	8,934.4	100.00	100.00	22.33	44.19	15.81	34.14
Metropolitan Area L	8,614.8	14,771.0	100.00	100.00	17.03	37.80	6.89	16.87
Metropolitan Area M	43,397.7	105,358.3	100.00	100.00	20.16	32.88	3.70	6.86
Metropolitan Area N	75,174.3	137,496.6	100.00	100.00	21.71	42.85	2.63	5.15
All other counties	60,489.3	181,326.1	100.00	100.00	36.08	58.95	8.80	16.45
Industry Groups								
Food and kindred products	17,389.2	38,933.1	100.00	100.00	32.16	60.94	8.03	14.47
Tobacco manufactures	538.0	768.4	100.00	100.00	10.48	22.50	15.39	40.99
Textile mill products	15,841.6	30,361.3	100.00	100.00	25.94	45.89	10.16	26.29
Apparel and related products	2,986.4	3,124.6	100.00	100.00	10.67	36.06	9.50	32.68
Lumber and products, except furniture	1,030.8	1,583.2	100.00	100.00	24.64	67.02	1.93†	4.01†
Furniture and fixtures	1,559.1	2,777.9	100.00	100.00	31.85	71.87	3.93	8.23
Paper and allied products	15,016.4	48,968.9	100.00	100.00	57.72	81.49	4.50	6.56
Printing and publishing industries§	2,786.9	2,849.2	100.00	100.00	4.33	17.19	10.39	40.56
Chemicals and allied products	19,236.5	58,921.8	100.00	100.00	40.15	56.89	10.30	20.30
Petroleum and coal products	10,106.5	26,519.9	100.00	100.00	27.90	58.14	4.16	9.34
Rubber products	3,149.3	5,476.6	100.00	100.00	24.40	66.50	1.62	5.01
Leather and leather products	2,210.4	6,120.8	100.00	100.00	50.46	75.04	9.07	16.97
Stone, clay, and glass products	44,503.0	141,291.6	100.00	100.00	51.25	72.14	1.72	2.35
Primary metal industries	324,134.4	854,256.6	100.00	100.00	8.01	16.12	1.07	1.96
Fabricated metal products	13,588.1	20,792.2	100.00	100.00	14.00	35.95	2.63	6.80
Machinery (except electrical)	14,329.3	23,188.1	100.00	100.00	17.16	45.92	2.11	4.14
Electrical machinery	8,455.0	19,661.4	100.00	100.00	32.45	71.84	2.06	4.39
Transportation equipment	7,011.8	13,869.2	100.00	100.00	22.69	52.31	3.70	9.21
Instruments and related products	866.1	1,100.0	100.00	100.00	19.63	57.64	.87	1.85
Miscellaneous manufactures	2,453.9	4,425.0	100.00	100.00	15.63	34.28	17.00	37.08
EAST NORTH CENTRAL								
OHIO	403,959.8	976,211.9	100.00	100.00	19.40	38.40	.37	.60
Metropolitan Area A	17,504.0	31,191.9	100.00	100.00	13.46	31.66	.28	.53
Metropolitan Area B	7,601.4	16,776.4	100.00	100.00	32.82	61.19	3.42	5.98
Metropolitan Area C	12,229.2	22,958.8	100.00	100.00	29.51	63.88	.34	.49
Metropolitan Area D	14,575.7	38,865.4	100.00	100.00	27.04	38.68	.11	.18
Metropolitan Area E	75,882.8	163,423.7	100.00	100.00	14.57	30.20	.57	1.12
Metropolitan Area F	17,807.7	61,383.5	100.00	100.00	54.43	88.58	.48	.66
Metropolitan Area G	23,876.9	52,920.7	100.00	100.00	13.81	33.82	.03	.06
Metropolitan Area H	105,636.8	257,774.4	100.00	100.00	7.05	15.54	.03	.04
Metropolitan Area J	12,288.1	38,558.0	100.00	100.00	14.28	29.44	.36	.53
Metropolitan Area K	15,122.6	31,793.0	100.00	100.00	38.14	72.79	1.83	3.31
Metropolitan Area L	5,902.2	18,186.9	100.00	100.00	28.05	51.05	----	----
All other counties	95,532.4	242,379.8	100.00	100.00	26.48	49.32	.26	.38

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
----	----	18.26	28.52	----	----	2.47	1.09	----	----	47.28	4.55
5.43	4.68	49.55	57.83	----	----	4.85	2.23	----	----	22.64	3.07
11.48	9.67	37.10	48.48	----	----	5.72	2.67	----	----	27.26	4.51
10.08	14.42	19.83	31.84	----	----	11.93	8.60	----	----	45.21	7.80
4.58	5.61	17.82	29.48	----	----	5.45	3.41	----	----	53.87	9.41
.03	.03	18.71	33.52	----	----	9.89	6.87	----	----	54.11	11.30
1.82	1.76	25.27	41.83	----	----	3.33	2.19	----	----	51.54	10.64
.01	----	29.21	72.30	----	----	4.96	3.74	----	----	62.54	15.03
.24	.21	26.25	46.75	----	----	6.43	3.86	----	----	49.86	7.32
36.36	36.16	12.27	9.36	4.90	5.76	2.86	3.23	4.77	6.06	18.55	2.45
24.51	21.92	12.76	9.90	.47	.45	1.26	1.63	1.88	1.55	29.18	4.18
62.40	57.90	17.75	15.13	1.18	1.34	----	----	3.80	8.75	8.44	1.50
.62	.54	1.34	1.17	.50	.65	2.90	1.24	.40	.29	57.86	8.40
50.53	48.94	6.02	3.65	7.47	8.08	1.76	1.56	9.58	11.10	11.88	1.78
72.55	65.85	13.76	8.48	.64	.55	8.09	20.13	.01	.01	2.51	.21
1.93	1.18	3.78	2.74	3.56	2.60	.03	.01	----	----	16.87	1.16
.62	.47	4.19	3.95	.39	.35	.89	.29	.39	.30	57.79	8.33
48.42	47.82	19.48	16.50	.02	.01	7.97	11.05	.27	.32	9.69	.95
3.15	2.32	11.62	11.84	.46	.49	1.35	.63	1.08	.86	41.12	5.13
5.80	4.66	9.75	9.21	.17	.19	1.45	.54	.27	.27	44.42	6.79
21.44	20.60	14.58	17.15	.20	.34	1.99	1.20	.10	.10	37.73	5.95
39.85	36.41	13.70	12.46	.04	.03	7.40	9.30	.01	.01	15.15	2.04
5.51	7.42	29.35	34.70	.22	.28	4.57	3.07	.38	.36	35.63	6.17
7.18	4.09	11.48	6.75	10.64	10.74	.27	.08	.41	.42	25.14	2.52
.29	.24	15.37	14.98	2.74	3.13	3.81	1.58	.68	.54	36.93	4.12
----	----	17.86	27.51	.41	.56	.24	.13	.09	.09	55.52	8.21
.01	.02	18.56	21.31	.16	.20	.38	.17	.07	.05	44.73	6.07
.06	.08	10.09	17.98	.99	2.23	2.29	1.73	.42	.62	65.97	8.63
.02‡	----	20.88	22.75	.77‡	1.09‡	.33‡	.17‡	.15‡	.13‡	51.29	4.83
.42	.36	8.66	9.42	2.29	3.28	3.91	1.76	.66	.53	48.29	4.57
.18	.12	13.02	9.10	.08	.07	.20	.05	.02	.01	24.27	2.61
.01	----	6.49	12.82	2.72	6.27	9.30	7.86	1.00	1.67	65.75	13.63
.35	.32	23.12	16.17	3.08	3.00	.74	.56	.34	.23	21.92	2.54
.05	.04	12.05	9.06	2.64	2.66	5.82	11.25	.76	1.77	46.61	7.75
----	----	11.02	15.01	.24	.32	.10	.03	.13	.13	62.49	13.00
.34	.24	5.78	4.39	1.11	1.05	.30	.10	.03	.02	32.90	2.18
.84	.59	6.13	3.86	18.03	17.14	.90	.72	.89	.84	20.24	2.36
55.84	54.57	12.00	8.62	3.64	4.30	3.30	4.11	7.03	8.86	9.12	1.46
7.05	7.40	12.60	15.94	10.68	19.94	5.54	3.60	1.83	2.06	45.67	8.31
9.16	8.73	14.19	17.12	6.91	12.79	2.62	1.63	1.67	2.04	46.18	7.64
1.21	.77	6.81	5.77	7.98	9.15	1.41	.53	1.35	1.18	46.73	6.37
6.59	5.44	17.20	16.07	4.45	6.45	2.47	2.76	.85	.96	42.04	6.80
1.41	1.80	13.47	18.77	1.69	2.85	5.31	4.15	1.42	1.83	56.21	11.11
1.01	1.18	13.17	15.50	1.55	1.86	2.03	.92	1.32	1.12	48.28	8.07
32.70	32.27	12.50	9.54	6.08	6.54	.90	1.29	5.66	8.21	22.39	3.14
38.03	40.90	4.28	4.59	2.60	3.56	5.61	9.42	2.90	4.70	32.84	4.64
2.61	2.08	4.38	3.50	18.60	22.09	----	----	----	----	38.17	5.16
4.46	3.22	1.62	1.52	19.04	24.05	----	----	----	----	45.03	6.84
26.67	33.95	17.85	13.96	7.39	6.43	1.49	3.69	.63	.37	18.83	2.74
37.10	38.17	13.24	11.80	5.43	5.73	.24	.21	5.38	9.29	23.47	3.47
5.36	3.16	2.98	1.46	4.03	2.70	----	----	----	----	32.73	3.44
17.89	20.43	18.57	14.68	9.43	11.25	.26	.36	8.60	13.16	31.41	6.25
52.70	52.39	18.54	13.45	2.63	2.83	.47	1.26	8.33	12.84	10.25	1.65
34.75	40.67	22.17	13.18	5.75	5.11	8.53	8.60	----	----	14.16	2.47
2.64	2.11	8.45	8.43	----	----	----	----	9.22	8.25	39.72	5.10
52.01	36.76	1.86	1.31	2.28	2.81	8.41	5.75	.83	1.62	6.57	.69
25.13	22.61	8.27	6.06	8.97	10.02	.15	.04	6.18	8.42	24.56	3.16

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
EAST NORTH CENTRAL—continued								
OHIO—continued								
Industry Groups								
Food and kindred products	\$ 11,857.1	25,114.7	100.00	100.00	39.37	76.64	.85	1.44
Tobacco manufactures	123.9	219.2	100.00	100.00	46.17	92.02	.08	-----
Textile mill products	1,550.7	4,293.1	100.00	100.00	53.18	88.13	2.53	3.85
Apparel and related products	768.5	896.6	100.00	100.00	18.92	58.73	2.42	7.36
Lumber and products, except furniture	736.3	1,353.6	100.00	100.00	38.27	88.84	.67‡	1.12‡
Furniture and fixtures	1,938.4	3,617.1	100.00	100.00	30.20	70.62	.71	1.19
Paper and allied products	10,962.4	39,487.9	100.00	100.00	74.17	94.77	1.65	1.78
Printing and publishing industries§	2,443.2	2,732.2	100.00	100.00	16.15	53.99	1.27	4.09
Chemicals and allied products	24,918.0	77,308.6	100.00	100.00	47.71	74.07	1.14	1.44
Petroleum and coal products	5,351.1	15,001.1	100.00	100.00	25.79	46.07	2.11	2.98
Rubber products	12,572.5	42,488.6	100.00	100.00	54.95	93.77	.40	.53
Leather and leather products	752.4	1,772.3	100.00	100.00	49.51	90.47	1.58	1.86
Stone, clay, and glass products	32,210.3	108,633.1	100.00	100.00	51.69	73.10	.15	.22
Primary metal industries	239,715.3	564,170.1	100.00	100.00	6.35	13.21	.15	.26
Fabricated metal products	14,668.9	22,148.2	100.00	100.00	16.02	50.51	.55	1.33
Machinery (except electrical)	22,219.0	35,632.9	100.00	100.00	18.34	51.26	.35	.92
Electrical machinery	7,485.9	9,870.4	100.00	100.00	17.66	55.72	.14	.39
Transportation equipment	10,214.3	15,465.4	100.00	100.00	21.89	63.88	.09	.16
Instruments and related products	394.1	510.8	100.00	100.00	18.55	61.04	4.59	8.46
Miscellaneous manufactures	3,077.5	5,495.9	100.00	100.00	26.32	67.74	1.52	2.96
INDIANA	202,677.1	452,935.4	100.00	100.00	15.00	33.51	.23	.42
Metropolitan Area A	134,043.6	293,084.3	100.00	100.00	6.43	14.09	.06	.08
Metropolitan Area B	4,503.4	10,443.6	100.00	100.00	40.78	80.73	.27	.41
Metropolitan Area C	4,680.2	7,232.6	100.00	100.00	22.23	61.29	.06	.28
Metropolitan Area D	12,543.8	22,605.9	100.00	100.00	23.60	65.87	.66	1.35
Metropolitan Area E	2,924.1	7,928.7	100.00	100.00	32.03	80.73	.18	.22
Metropolitan Area F	1,616.8	6,210.2	100.00	100.00	62.25	91.51	.87	.78
All other counties	42,365.2	105,430.4	100.00	100.00	33.03	66.99	.64	1.20
Industry Groups								
Food and kindred products	9,722.3	26,490.3	100.00	100.00	44.90	81.47	.46	.67
Tobacco manufactures	47.3	124.7	100.00	100.00	42.92	92.46	-----	-----
Textile mill products	682.2	1,762.7	100.00	100.00	42.47	73.72	5.97	15.85
Apparel and related products	468.0	806.4	100.00	100.00	37.22	78.96	.96	4.09
Lumber and products, except furniture	726.8	1,485.3	100.00	100.00	33.23	87.67	.04‡	-----‡
Furniture and fixtures	1,769.8	3,776.2	100.00	100.00	38.29	85.96	1.29	2.49
Paper and allied products	3,009.7	12,153.4	100.00	100.00	68.50	95.39	.50	.54
Printing and publishing industries§	795.9	764.6	100.00	100.00	14.27	53.11	.44	1.33
Chemicals and allied products	5,942.9	15,013.2	100.00	100.00	28.28	65.67	1.91	2.39
Petroleum and coal products	5,361.0	17,403.9	100.00	100.00	45.99	72.05	-----	-----
Rubber products	2,035.7	4,040.3	100.00	100.00	35.54	86.96	-----	-----
Leather and leather products	139.3	441.7	100.00	100.00	54.27	95.49	-----	-----
Stone, clay, and glass products	13,862.8	46,473.7	100.00	100.00	42.08	66.91	.69	.91
Primary metal industries	132,062.6	275,218.2	100.00	100.00	4.12	8.59	-----	.01
Fabricated metal products	4,686.9	7,944.4	100.00	100.00	18.42	53.16	.56	1.47
Machinery (except electrical)	7,773.4	12,431.0	100.00	100.00	20.09	60.62	.33	.78
Electrical machinery	3,778.6	5,556.9	100.00	100.00	20.00	68.65	.06	.14
Transportation equipment	8,794.0	19,334.5	100.00	100.00	31.31	71.25	.09	.12
Instruments and related products	119.0	113.8	100.00	100.00	8.82	36.82	-----	-----
Miscellaneous manufactures	898.9	1,600.4	100.00	100.00	31.62	69.74	6.03	13.49
ILLINOIS	256,739.7	604,355.0	100.00	100.00	19.35	44.82	.73	1.13
Metropolitan Area A	3,253.3	7,576.0	100.00	100.00	23.39	56.51	.35	.67
Metropolitan Area B	4,299.1	7,741.7	100.00	100.00	25.01	65.18	.34	.66
Metropolitan Area C	184,152.9	370,835.4	100.00	100.00	13.43	31.32	.49	.92
Metropolitan Area D	8,781.9	39,010.8	100.00	100.00	52.94	85.23	.08	.07
Metropolitan Area E	1,140.7	2,200.0	100.00	100.00	20.53	67.40	.56	1.73
Metropolitan Area F	24,440.7	84,690.2	100.00	100.00	26.76	51.67	.24	.34
All other counties	30,671.1	92,300.7	100.00	100.00	38.06	72.49	2.82	3.23
Industry Groups								
Food and kindred products	27,416.5	89,550.8	100.00	100.00	48.54	84.32	.68	.80
Tobacco manufactures	48.3	147.6	100.00	100.00	65.63	97.63	-----	-----
Textile mill products	1,272.8	2,980.4	100.00	100.00	40.19	75.87	2.40	4.26

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.62	.50	6.18	5.36	9.03	9.21	.34	.25	2.29	2.07	41.33	4.52
----	----	1.13	.87	1.86	2.01	----	----	.16	.14	50.61	4.97
----	----	2.87	1.99	1.63	1.22	----	----	----	----	39.79	4.82
.22	.28	4.75	7.05	8.74	15.17	.57	.76	1.31	1.94	63.06	8.71
.01‡	----	3.27	3.02	1.09‡	1.13‡	----	----	1.40‡	1.47‡	55.29	4.41
.23	.14	3.71	3.00	13.73	17.89	.01	----	.84	.81	50.57	6.34
.01	.01	2.70	1.47	.32	.19	.10	.02	.38	.19	20.65	1.57
.18	.36	3.75	6.17	10.38	20.73	.20	.25	1.96	3.32	66.11	11.08
19.58	13.60	10.23	6.66	2.22	1.70	.35	.21	.48	.28	18.28	2.05
.01	----	8.87	6.63	.52	.42	19.36	36.96	.97	1.26	42.36	5.67
.11	.08	.48	.26	.82	.55	.05	.02	----	----	43.19	4.79
.01	----	3.77	2.69	1.45	1.22	.19	.04	.28	.25	43.21	3.46
1.04	.47	5.57	2.86	19.34	17.92	1.07	.66	4.28	3.19	16.87	1.58
51.99	53.25	16.67	13.08	3.45	3.77	.80	1.03	8.40	13.11	12.20	2.29
4.31	4.48	10.49	12.18	13.94	20.51	.46	.51	1.60	1.95	52.63	8.53
4.98	4.90	7.26	8.13	16.60	24.49	.10	.11	1.22	1.54	51.15	8.65
4.20	5.48	1.68	1.92	10.86	20.06	.18	.14	.40	.60	64.88	15.70
.43	.53	7.40	7.79	8.30	12.64	.63	.82	1.59	2.15	59.67	12.03
.05	----	6.95	6.19	9.39	14.86	----	----	.76	1.04	59.71	8.42
1.67	1.49	8.81	9.34	6.63	7.79	.04	.02	3.34	3.72	51.67	6.94
40.99	34.98	14.16	14.14	2.81	4.07	7.26	8.71	1.47	1.58	18.08	2.59
59.09	51.98	15.90	17.16	.55	.88	9.87	12.84	1.35	1.61	6.75	1.36
5.09	2.94	5.87	4.85	.07	.05	4.90	1.91	5.64	4.00	37.38	5.10
.65	.62	7.71	8.90	11.75	15.50	1.72	1.13	1.85	1.78	54.03	10.51
6.12	5.51	13.30	13.41	.82	1.38	5.57	4.40	.17	.15	49.75	7.93
2.03	1.31	2.53	1.39	10.88	10.02	.05	.02	1.71	.80	50.59	5.50
.88	.40	10.22	5.34	.35	.27	.37	.10	.18	.07	24.88	1.54
6.54	4.13	11.44	8.65	9.37	12.90	1.15	.52	1.80	1.69	36.04	3.92
.25	.39	15.44	11.20	2.13	2.19	1.53	.65	.74	.45	34.56	2.98
----	----	.42	----	4.86	3.45	----	----	----	----	51.80	4.09
----	----	8.11	5.80	.12	.09	.57	.14	.72	.36	42.06	4.04
.34	.31	8.95	8.84	1.30	2.28	.51	.27	.77	.67	49.94	4.58
----	----	5.85	5.43	1.28‡	1.47‡	.10‡	.03‡	.12‡	.06‡	59.38	5.35
.09	.13	2.11	1.77	3.36	3.38	1.85	1.03	.58	.41	52.44	4.82
----	----	3.82	1.76	.57	.35	.10	.02	.04	.01	26.47	1.92
.25	.65	6.13	12.49	3.87	11.71	2.75	2.59	4.52	6.96	67.76	11.16
1.65	2.06	24.29	20.17	2.28	2.20	.56	.19	1.31	1.24	39.73	6.08
.10	.37	19.73	11.45	5.13	8.00	3.08	3.13	1.01	1.71	24.95	3.29
----	----	2.48	2.15	.05	.05	.31	.16	.03	.01	61.58	10.67
----	----	2.58	1.40	1.22	.95	.50	.14	----	----	41.42	2.01
8.31	3.99	9.20	5.00	15.62	19.15	.52	.16	1.52	1.46	22.07	2.42
61.29	56.21	15.78	17.79	.85	1.02	9.96	13.51	1.31	1.64	6.69	1.23
3.35	3.06	12.45	13.31	8.87	13.43	8.05	6.80	1.92	1.68	46.38	7.10
7.59	8.06	8.67	9.20	5.04	7.71	3.12	2.02	3.09	2.84	52.08	8.78
1.80	1.70	1.49	1.88	6.28	10.17	.93	.81	1.20	1.18	68.23	15.49
.45	.31	9.12	8.49	6.74	7.75	4.56	2.64	4.24	3.41	43.50	6.04
.17	----	20.42	41.92	.50	.70	7.06	7.29	----	.09	63.03	13.18
.22	.31	4.09	3.84	1.66	2.07	2.16	1.07	4.46	3.54	49.76	5.93
30.46	23.39	14.70	13.10	3.78	7.34	1.35	1.15	4.22	5.86	25.42	3.20
16.16	9.43	5.82	4.83	16.78	20.89	.14	.05	3.37	3.30	33.98	4.32
8.86	7.14	10.84	11.47	8.07	8.18	2.05	.84	1.10	.83	43.71	5.71
37.61	34.00	16.39	16.95	1.39	2.91	1.50	1.51	5.42	8.99	23.76	3.40
4.53	1.45	6.74	3.52	7.28	7.41	.01	----	.23	.08	28.20	2.24
.96	.79	13.17	12.82	7.06	6.71	.59	.29	.90	.73	56.23	9.52
26.36	13.19	9.59	7.27	14.14	23.75	1.16	1.00	.70	.39	21.06	2.40
3.91	2.45	12.42	7.88	6.72	8.90	1.03	.45	1.62	1.51	33.43	3.09
1.47	1.09	10.96	6.62	2.34	2.72	.61	.18	2.30	1.45	33.10	2.83
----	----	.62	.41	.21	.14	----	----	----	----	33.54	1.83
.16	.17	14.35	14.15	.63	.79	1.31	.38	.43	.25	40.52	4.13

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
EAST NORTH CENTRAL—continued								
ILLINOIS—continued								
Apparel and related products	\$ 1,605.3	1,603.3	100.00	100.00	17.21	62.59	1.22	3.80
Lumber and products, except furniture	994.0	2,090.5	100.00	100.00	34.66	87.35	.37†	.36‡
Furniture and fixtures	2,482.8	4,983.1	100.00	100.00	36.39	80.71	.67	1.07
Paper and allied products	6,082.7	22,511.9	100.00	100.00	56.12	85.38	.20	.17
Printing and publishing industries§	4,630.5	4,354.3	100.00	100.00	9.53	36.10	.59	1.75
Chemicals and allied products	14,707.7	50,399.7	100.00	100.00	43.72	75.80	3.46	2.91
Petroleum and coal products	6,370.8	22,266.5	100.00	100.00	38.07	65.73	.03	.02
Rubber products	850.6	1,536.9	100.00	100.00	24.59	70.06	.22	.16
Leather and leather products	1,434.2	3,155.7	100.00	100.00	43.76	90.08	.33	.56
Stone, clay, and glass products	14,620.0	51,950.9	100.00	100.00	35.75	55.66	1.47	1.75
Primary metal industries	125,207.5	262,715.6	100.00	100.00	4.70	12.30	.51	1.00
Fabricated metal products	12,725.6	18,611.6	100.00	100.00	13.14	41.37	.48	1.19
Machinery (except electrical)	20,996.3	39,127.9	100.00	100.00	20.98	57.73	.33	.64
Electrical machinery	6,884.4	12,481.6	100.00	100.00	25.63	68.83	.49	1.04
Transportation equipment	4,064.9	7,506.8	100.00	100.00	23.11	63.21	.45	1.25
Instruments and related products	1,558.4	2,517.3	100.00	100.00	20.54	59.74	.17	.10
Miscellaneous manufactures	2,786.4	3,862.5	100.00	100.00	19.12	56.98	.58	1.32
MICHIGAN	217,109.4	446,083.8	100.00	100.00	29.49	53.35	.59	.83
Metropolitan Area A	5,807.4	8,415.0	100.00	100.00	13.73	32.41	.73	1.03
Metropolitan Area B	6,130.4	9,978.4	100.00	100.00	29.22	59.42	1.00	1.88
Metropolitan Area C	5,129.6	9,445.1	100.00	100.00	18.09	39.56	9.81	16.30
Metropolitan Area D**								
Metropolitan Area E	4,200.2	6,985.0	100.00	100.00	22.89	50.90	1.20	1.20
Metropolitan Area F	126,314.5	260,167.6	100.00	100.00	22.28	42.49	.28	.36
Metropolitan Area G	6,252.8	15,414.9	100.00	100.00	67.71	91.70	.10	.25
All other counties	63,274.5	135,677.9	100.00	100.00	42.94	71.74	.42	.62
Industry Groups								
Food and kindred products	10,301.0	18,805.7	100.00	100.00	36.19	64.74	1.49	2.38
Tobacco manufactures	38.6	112.9	100.00	100.00	53.11	92.83	7.25	4.52
Textile mill products	870.5	1,482.0	100.00	100.00	31.19	69.83	.28	.34
Apparel and related products	303.9	320.6	100.00	100.00	23.72	48.22	1.94	6.33
Lumber and products, except furniture	1,337.4	1,772.4	100.00	100.00	29.46	74.80	.10†	.14‡
Furniture and fixtures	1,873.5	3,499.2	100.00	100.00	45.23	81.46	3.60	6.17
Paper and allied products	15,381.6	45,212.3	100.00	100.00	79.69	94.03	3.29	3.44
Printing and publishing industries§	1,155.9	806.4	100.00	100.00	10.62	44.18	.91	5.36
Chemicals and allied products	31,053.9	83,378.5	100.00	100.00	49.55	67.73	.42	.47
Petroleum and coal products	3,629.5	8,534.0	100.00	100.00	.86	1.26	.16	.18
Rubber products	3,910.5	7,850.3	100.00	100.00	49.90	90.31	.05	.10
Leather and leather products	767.0	1,687.8	100.00	100.00	54.81	78.55	.12	.15
Stone, clay, and glass products	8,873.3	26,004.1	100.00	100.00	61.53	83.92	.16	.15
Primary metal industries	61,019.6	112,474.4	100.00	100.00	4.89	10.53	.17	.16
Fabricated metal products	11,194.1	13,992.8	100.00	100.00	17.74	49.21	.40	1.03
Machinery (except electrical)	13,380.0	17,631.0	100.00	100.00	19.38	53.02	.86	2.12
Electrical machinery	1,263.0	1,260.1	100.00	100.00	11.87	35.97	.33	1.61
Transportation equipment	49,483.5	99,614.7	100.00	100.00	30.23	61.15	.20	.22
Instruments and related products	252.9	252.7	100.00	100.00	18.03	50.81	2.02	5.03
Miscellaneous manufactures	1,019.7	1,391.7	100.00	100.00	33.99	76.43	.65	1.28
WISCONSIN	74,060.9	140,376.4	100.00	100.00	44.06	76.11	1.12	1.55
Metropolitan Area A	483.8	882.8	100.00	100.00	50.23	83.69	3.45	6.33
Metropolitan Area B	1,316.7	2,769.9	100.00	100.00	49.06	82.76	.39	.46
Metropolitan Area C	25,137.4	41,621.2	100.00	100.00	31.70	64.87	.74	1.14
All other counties	47,123.0	95,102.5	100.00	100.00	50.46	80.76	1.32	1.72
Industry Groups								
Food and kindred products	15,908.2	34,715.6	100.00	100.00	54.37	79.88	2.58	3.04
Textile mill products	869.4	1,594.1	100.00	100.00	53.06	87.93	.35	.80
Apparel and related products	291.7	360.1	100.00	100.00	26.95	72.76	2.26	6.36
Lumber and products, except furniture	1,174.7	1,619.2	100.00	100.00	34.81	78.64	.42‡	1.10‡
Furniture and fixtures	1,060.7	2,692.2	100.00	100.00	57.28	89.53	1.28	1.32
Paper and allied products	16,553.2	39,979.0	100.00	100.00	70.66	92.95	1.41	1.44
Printing and publishing industries§	923.8	696.5	100.00	100.00	14.40	57.93	1.12	4.74
Chemicals and allied products	1,691.6	3,652.4	100.00	100.00	58.45	88.23	.47	.70

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.60	2.48	7.57	13.61	.92	2.06	.91	.66	3.75	6.17	67.81	8.62
-----‡	-----‡	8.76	7.68	.43‡	.46‡	-----‡	-----‡	.50‡	.35‡	55.27	3.79
.10	.10	9.67	9.32	1.24	1.52	2.32	.80	3.01	2.58	46.60	3.91
-----	-----	13.93	8.31	2.73	4.16	.19	.09	.53	.25	26.30	1.65
.09	.23	11.87	25.53	2.06	7.44	1.67	1.28	5.69	12.42	68.50	15.25
2.14	1.83	14.91	9.12	4.80	6.30	.20	.05	2.10	1.48	28.66	2.51
.03	.01	17.72	11.62	3.11	7.70	10.75	11.32	.46	.36	29.83	3.24
-----	-----	13.25	14.89	.98	2.02	.14	.05	1.03	.96	59.78	11.86
.01	-----	4.41	4.07	.16	.12	.22	.18	.22	.13	50.88	4.86
1.48	1.11	20.46	11.60	18.90	25.13	.71	.40	2.91	2.64	18.32	1.71
59.70	51.38	14.99	15.64	2.32	6.26	1.29	1.20	5.23	9.98	11.26	2.23
3.06	3.42	18.32	23.96	6.00	11.22	3.33	2.81	7.24	8.99	48.43	7.05
9.71	7.83	12.76	13.12	4.91	7.84	.41	.17	4.63	5.37	46.28	7.30
.37	.36	13.37	14.33	1.95	2.66	1.78	.80	4.19	4.77	52.22	7.22
.94	.83	17.50	19.25	2.89	3.49	.52	.24	2.92	3.54	51.66	8.20
.03	.10	18.07	22.51	1.95	5.20	.48	.23	3.92	4.08	54.84	8.04
.55	.58	18.81	25.38	2.59	5.25	.83	.44	2.76	3.16	54.76	6.90
13.00	12.75	14.08	13.07	4.33	4.98	2.39	2.43	4.18	7.91	31.95	4.68
41.06	35.84	2.32	3.23	10.12	21.06	-----	-----	-----	-----	32.04	6.43
1.78	1.96	20.20	22.54	5.61	8.07	.30	.14	.56	.46	41.32	5.52
23.22	17.85	2.22	2.20	12.33	16.98	.18	.10	1.38	1.69	32.78	5.33
2.91	2.52	23.05	25.23	7.01	11.92	.09	.03	.12	.10	42.73	8.10
16.66	17.88	14.53	13.21	3.86	3.98	3.66	3.98	7.01	13.43	31.72	4.68
1.84	1.16	4.19	2.73	2.79	1.73	.08	.02	.18	.09	23.12	2.34
5.17	3.76	15.01	14.03	3.92	4.87	.83	.35	.14	.09	31.58	4.54
1.52	1.60	20.09	19.79	5.86	6.41	.70	.30	.71	.69	33.44	4.08
-----	-----	.26	-----	1.30	.71	.26	.09	-----	.09	37.82	1.77
2.02	7.70	12.46	13.18	.83	.94	.17	.07	.09	.06	52.96	7.87
.26	-----	17.64	30.35	2.93	6.61	.99	.69	.43	.56	52.09	7.24
-----‡	-----	12.70	14.38	.86‡	.99‡	.04‡	.02‡	.01‡	.01‡	56.83	9.66
.44	.35	5.39	4.52	2.21	2.42	1.62	.73	.95	.65	40.55	3.70
-----	.01	1.55	.91	.10	.06	.03	.01	.03	.01	15.30	1.53
.29	.62	5.84	13.00	6.32	16.23	1.64	1.71	1.10	2.48	73.28	16.42
9.89	7.36	15.72	12.45	4.13	5.07	1.31	.82	2.33	3.27	16.65	2.82
2.37	9.53	2.98	2.48	.74	1.78	69.51	81.51	.03	.02	23.35	3.25
-----	-----	1.48	1.42	.34	.25	.06	.02	.08	.07	48.09	7.83
-----	-----	26.60	18.85	.47	.38	.12	.04	-----	-----	17.89	2.04
3.81	2.15	13.97	8.71	1.37	.94	3.86	2.79	.15	.07	15.15	1.27
34.45	36.28	20.63	21.78	3.79	4.78	1.45	1.35	9.28	20.55	25.36	4.57
3.18	3.95	14.16	20.28	7.05	9.76	1.25	.77	3.29	5.34	52.94	9.65
4.11	5.20	13.49	18.46	6.01	9.57	1.50	1.01	1.18	1.24	53.47	9.37
.29	.59	19.46	35.33	6.37	11.21	3.67	3.01	1.09	1.51	56.91	10.78
5.29	6.65	9.95	8.91	6.35	7.44	.99	.53	4.05	8.28	42.94	6.84
.04	-----	9.81	17.93	7.95	11.75	2.02	1.50	.55	.83	59.59	12.15
.26	.36	8.53	9.40	3.40	4.21	1.53	.75	.81	.70	50.83	6.86
4.34	3.41	12.32	11.95	.01	.01	3.42	1.87	-----	-----	34.73	5.11
1.14	1.12	2.42	1.97	-----	-----	1.41	.70	-----	-----	41.36	6.18
3.33	2.60	11.21	8.64	-----	-----	4.83	2.04	-----	-----	31.18	3.50
5.48	4.96	17.28	19.81	-----	-----	4.20	2.61	-----	-----	40.60	6.60
3.80	2.77	9.81	8.70	.01	.01	2.98	1.55	-----	-----	31.63	4.49
.60	.51	14.38	13.24	-----	-----	1.43	.59	-----	-----	26.63	2.74
.08	.16	7.10	6.46	-----	-----	.36	.16	-----	-----	39.06	4.50
.07	-----	8.88	10.16	-----	-----	4.87	3.42	-----	-----	56.98	7.30
-----‡	-----‡	10.31	12.52	-----‡	-----	.18‡	.09‡	-----	-----	54.29	7.65
.07	-----	9.25	6.24	-----	-----	2.26	.74	-----	-----	29.86	2.17
.09	.17	1.33	.97	-----	-----	.07	.03	-----	-----	26.43	4.44
.09	-----	5.25	10.51	-----	-----	9.84	11.73	-----	-----	69.31	15.09
-----	-----	8.33	7.20	-----	-----	2.22	1.00	-----	-----	30.53	2.87

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
EAST NORTH CENTRAL—continued								
WISCONSIN—continued								
Petroleum and coal products	\$ 377.5	629.3	100.00	100.00	42.94	82.44	2.76	6.86
Leather and leather products	1,640.7	3,079.2	100.00	100.00	57.46	92.74	.34	.49
Stone, clay, and glass products	2,270.9	4,494.8	100.00	100.00	38.26	67.79	.66	.90
Primary metal industries	8,721.0	11,567.0	100.00	100.00	14.79	34.81	.14	.22
Fabricated metal products	4,929.7	6,778.9	100.00	100.00	22.11	54.46	.68	1.16
Machinery (except electrical)	9,847.8	15,252.7	100.00	100.00	27.94	61.10	.47	1.02
Electrical machinery	2,271.6	3,437.2	100.00	100.00	25.20	61.82	.29	.67
Transportation equipment	3,409.0	6,301.8	100.00	100.00	30.72	70.30	.13	.20
Instruments and related products	304.0	391.8	100.00	100.00	31.97	80.91	.03	----
Miscellaneous manufactures	556.2	850.0	100.00	100.00	40.97	78.91	.52	.60
WEST NORTH CENTRAL								
MINNESOTA	38,704.6	77,525.2	100.00	100.00	26.31	40.36	.67	1.13
Metropolitan Area A	10,498.9	24,709.5	100.00	100.00	13.59	20.37	.04	.04
Metropolitan Area B	14,055.7	22,993.6	100.00	100.00	19.80	33.56	.58	.95
All other counties	14,150.0	29,822.0	100.00	100.00	42.20	62.16	1.23	2.17
Industry Groups								
Food and kindred products	10,992.2	24,397.5	100.00	100.00	25.46	39.36	1.44	2.39
Textile mill products	300.3	594.7	100.00	100.00	40.13	65.65	.93	1.28
Apparel and related products	327.4	190.0	100.00	100.00	8.92	40.00	.43	2.68
Lumber and products, except furniture	510.0	835.2	100.00	100.00	26.18	58.35	1.61‡	3.65‡
Furniture and fixtures	194.0	222.9	100.00	100.00	24.38	58.77	.05	----
Paper and allied products	6,217.6	13,817.7	100.00	100.00	66.95	80.66	.10	.09
Printing and publishing industries§	793.5	625.0	100.00	100.00	15.85	54.91	.82	2.03
Chemicals and allied products	1,364.9	1,908.0	100.00	100.00	29.23	60.15	1.38	3.06
Petroleum and coal products	454.4	829.6	100.00	100.00	16.75	24.31	3.28	4.89
Leather and leather products	128.5	238.2	100.00	100.00	44.12	89.46	.31	----
Stone, clay, and glass products	1,927.4	4,825.1	100.00	100.00	44.56	69.94	1.24	1.53
Primary metal industries	9,942.2	22,209.8	100.00	100.00	6.47	9.77	.08	.08
Fabricated metal products	1,132.5	1,161.7	100.00	100.00	10.76	31.13	.34	1.09
Machinery (except electrical)	2,264.1	2,951.6	100.00	100.00	15.19	31.42	.23	.52
Electrical machinery	721.6	607.2	100.00	100.00	8.16	26.32	.03	----
Transportation equipment	255.0	544.9	100.00	100.00	26.94	32.21	----	----
Instruments and related products	39.4	30.1	100.00	100.00	19.29	60.80	1.02	8.31
Miscellaneous manufactures	1,045.0	1,436.6	100.00	100.00	9.54	19.70	.05	.17
IOWA	26,947.4	70,396.7	100.00	100.00	35.50	66.17	.81	1.23
Metropolitan Area A	1,193.1	2,863.6	100.00	100.00	6.19	8.42	1.68	2.30
Metropolitan Area B	245.7	279.8	100.00	100.00	4.80	14.05	.04	----
Metropolitan Area C	2,814.2	7,297.7	100.00	100.00	36.28	68.10	.56	.77
Metropolitan Area D	1,642.9	5,174.6	100.00	100.00	37.03	79.14	.10	.10
All other counties	21,051.5	54,780.8	100.00	100.00	37.30	67.98	.86	1.35
Industry Groups								
Food and kindred products	9,121.5	26,364.2	100.00	100.00	42.14	72.35	.76	1.02
Textile mill products	55.0	137.3	100.00	100.00	46.36	89.66	----	----
Apparel and related products	118.6	109.8	100.00	100.00	14.92	57.29	1.52	4.64
Lumber and products, except furniture	242.6	431.8	100.00	100.00	35.16	89.18	.74‡	1.18‡
Furniture and fixtures	124.2	167.6	100.00	100.00	24.56	81.26	.24	----
Paper and allied products	812.4	2,837.8	100.00	100.00	80.99	96.85	.41	.36
Printing and publishing industries§	485.1	519.4	100.00	100.00	10.90	50.94	.76	2.93
Chemicals and allied products	3,231.3	5,774.3	100.00	100.00	23.35	62.07	.59	.88
Rubber products	578.4	999.5	100.00	100.00	19.85	57.41	.05	----
Leather and leather products	25.1	24.1	100.00	100.00	19.52	75.93	.40	----
Stone, clay, and glass products	4,560.4	19,777.7	100.00	100.00	56.46	62.75	1.73	1.70
Primary metal industries	2,404.5	4,797.5	100.00	100.00	16.82	52.92	----	----
Fabricated metal products	477.3	558.5	100.00	100.00	11.73	36.11	2.60	13.64
Machinery (except electrical)	3,943.8	6,815.1	100.00	100.00	20.44	56.13	.56	1.19
Electrical machinery	228.4	234.1	100.00	100.00	10.42	44.77	.35	1.07
Transportation equipment	254.0	389.5	100.00	100.00	15.59	53.81	.63	.64
Instruments and related products	32.4	32.7	100.00	100.00	20.99	72.17	----	----
Miscellaneous manufactures	241.0	401.4	100.00	100.00	25.93	70.50	1.24	2.54

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
----	----	2.70	2.86	----	----	.05	.03	----	----	51.55	7.80
.02	----	2.31	2.08	----	----	2.18	.79	----	----	37.70	3.90
10.64	7.56	19.99	16.94	----	----	9.61	4.27	----	----	20.84	2.54
18.72	20.22	23.98	32.26	.01	.01	5.06	4.32	----	----	37.30	8.16
7.11	8.31	17.56	22.49	.09	.09	8.20	5.50	----	----	44.24	7.99
6.48	6.08	17.32	20.28	----	----	6.24	4.56	----	----	41.55	6.97
1.65	1.80	19.64	23.88	----	----	5.53	3.51	----	----	47.70	8.32
5.47	4.60	13.01	12.84	----	----	7.04	5.00	----	----	43.63	7.06
----	----	4.01	4.11	----	----	4.57	2.88	----	----	59.41	12.10
2.70	2.33	8.94	10.72	.09	.09	4.64	2.49	----	----	42.14	4.86
16.93	18.33	14.60	14.09	5.86	15.63	3.85	5.33	.68	.68	31.10	4.46
49.76	49.25	16.84	13.66	----	----	11.53	15.67	.02	.01	8.23	.99
5.78	5.48	16.15	19.56	9.25	30.81	1.71	.94	1.78	2.20	44.94	6.51
3.64	2.61	11.40	10.23	6.85	16.88	.28	.14	.06	.06	34.34	5.75
1.98	1.69	18.03	15.85	14.16	35.33	1.00	.42	1.12	1.04	36.81	3.92
----	----	7.56	7.20	8.99	21.69	.17	.15	.17	.18	42.06	3.85
.03	----	8.12	33.26	.52	1.52	.37	.42	2.20	6.68	79.41	15.42
-----‡	-----‡	22.57	30.14	1.12‡	3.16‡	-----‡	-----‡	.10‡	.08‡	48.43	4.62
.36	----	16.96	30.06	1.75	3.10	1.96	1.35	-----‡	-----‡	54.54	6.73
----	----	.56	.47	4.00	10.81	.03	.02	.04	.03	28.33	7.93
.09	----	4.94	10.42	1.59	6.00	2.51	3.42	4.81	10.06	69.39	13.15
3.58	4.81	12.32	18.95	.51	1.21	.20	.12	.67	.80	52.11	10.91
----	----	17.12	18.45	1.41	3.28	18.93	43.01	-----	-----	42.52	6.05
----	----	3.97	4.17	.08	.13	.16	.08	.16	.13	51.21	6.03
14.55	10.23	7.72	5.09	4.75	9.75	.44	.21	.07	.08	26.67	3.18
57.24	57.55	18.78	15.79	.05	.07	11.33	15.81	.18	.31	5.88	.63
3.64	4.70	17.62	32.56	2.93	11.73	5.40	4.74	1.87	3.15	57.44	10.90
11.69	12.43	15.27	20.73	7.93	24.54	1.88	1.40	.70	.87	47.11	8.08
----	----	15.05	30.83	4.99	18.05	1.11	1.05	1.84	3.74	68.82	20.01
2.55	1.36	11.61	8.64	20.39	53.20	3.45	1.27	.55	.39	34.51	2.94
----	----	1.78	3.99	-----‡	.33	.76	1.00	6.85	14.29	70.30	11.30
.10	-----‡	42.40	69.05	.24	.52	.93	.53	.68	.76	46.07	9.26
7.44	4.33	6.37	4.68	9.66	18.58	.84	.27	.13	.10	39.24	4.63
.70	.26	17.06	16.02	26.64	65.26	2.32	.90	2.10	1.90	43.32	4.94
32.11	38.99	.77	.89	10.62	35.45	-----	-----	-----	-----	51.65	10.61
2.11	1.33	4.88	4.34	9.55	20.00	.90	.37	-----	-----	45.71	5.10
6.35	2.59	7.63	4.31	10.51	10.23	2.11	.54	-----	-----	36.27	3.09
8.33	4.93	5.93	4.19	8.64	16.65	.66	.21	.05	.03	38.23	4.67
.22	.13	7.84	5.30	9.98	17.49	.94	.28	.10	.09	38.01	3.34
----	----	1.82	.87	3.45	5.97	-----	-----	-----	-----	48.36	3.50
----	----	12.56	20.86	2.61	5.74	2.87	2.46	-----	-----	65.51	9.02
-----‡	-----‡	2.80	1.88	.49‡	.79‡	.29‡	.09‡	-----‡	-----‡	60.51	6.88
----	----	3.14	3.34	.72	2.09	2.09	1.49	2.74	3.88	66.51	7.94
----	----	1.86	1.07	.10	.05	.04	.01	-----	-----	16.61	1.66
.10	-----‡	4.35	7.05	9.01	22.55	3.79	2.64	.35	.44	70.73	10.45
8.88	8.68	5.94	6.39	2.77	7.39	.11	.04	.01	-----‡	58.35	14.54
----	----	7.35	11.60	5.34	16.59	.48	.65	-----	-----	66.93	13.76
.80	10.37	1.20	-----‡	.80	1.24	1.59	1.24	-----	-----	75.70	11.20
.04	.01	1.09	.42	24.28	34.15	.01	-----‡	-----	-----	16.40	.97
32.95	28.23	4.57	4.20	2.39	2.71	.42	.15	-----	-----	42.86	11.79
1.78	4.44	14.14	20.54	5.93	11.44	5.26	4.19	.10	.11	58.45	9.53
22.48	16.38	9.75	10.94	7.27	9.49	1.16	.49	.38	.44	37.95	4.94
----	----	12.70	16.96	5.60	13.20	7.01	7.56	1.53	2.90	62.39	13.54
2.91	2.54	17.64	25.16	4.25	8.42	1.89	1.18	-----	-----	57.09	8.24
----	----	1.85	1.83	6.79	10.70	2.47	1.53	.62	1.22	67.28	12.54
----	----	6.60	4.78	6.06	14.67	2.45	.95	1.00	.85	56.72	5.70

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
WEST NORTH CENTRAL—continued								
MISSOURI	\$39,861.5	100,551.0	100.00	100.00	23.01	50.97	.62	1.06
Metropolitan Area A	8,256.5	19,919.1	100.00	100.00	11.60	28.20	.21	.29
Metropolitan Area B	19,227.7	47,394.4	100.00	100.00	25.92	59.77	.95	1.68
All other counties	12,377.3	33,237.4	100.00	100.00	26.10	52.08	.39	.63
Industry Groups								
Food and kindred products	8,617.2	20,725.7	100.00	100.00	29.97	70.10	1.23	2.87
Textile mill products	245.4	422.5	100.00	100.00	23.96	68.21	1.10	1.21
Apparel and related products	843.8	804.9	100.00	100.00	8.77	44.59	1.26	4.42
Lumber and products, except furniture	409.8	763.3	100.00	100.00	21.82	61.44	4.25†	5.66‡
Furniture and fixtures	454.8	520.6	100.00	100.00	14.95	54.36	2.57	6.34
Paper and allied products	828.6	1,477.2	100.00	100.00	7.99	22.88	.17	.35
Printing and publishing industries§	859.9	743.3	100.00	100.00	4.72	19.74	1.26	5.81
Chemicals and allied products	3,215.2	11,181.3	100.00	100.00	38.90	65.52	.35	.39
Petroleum and coal products	748.8	2,871.8	100.00	100.00	18.31	25.36	.03	-----
Rubber products	147.6	77.8	100.00	100.00	5.22	40.36	-----	-----
Leather and leather products	908.8	1,756.4	100.00	100.00	30.70	84.73	1.65	3.47
Stone, clay, and glass products	9,956.9	35,574.4	100.00	100.00	34.70	55.08	.18	.19
Primary metal industries	5,001.7	11,186.4	100.00	100.00	1.82	3.12	.07	.07
Fabricated metal products	2,111.5	3,086.9	100.00	100.00	7.19	21.81	.36	.66
Machinery (except electrical)	1,448.9	2,082.0	100.00	100.00	10.65	37.75	.73	1.71
Electrical machinery	1,045.9	1,390.6	100.00	100.00	11.28	46.73	.36	1.09
Transportation equipment	2,279.7	4,324.7	100.00	100.00	14.93	47.13	.11	.18
Instruments and related products	137.1	252.8	100.00	100.00	29.47	77.73	.66	.99
Miscellaneous manufactures	455.2	579.7	100.00	100.00	13.27	45.64	3.23	7.88
NEBRASKA	7,149.9	16,197.9	100.00	100.00	15.78	32.17	.85	1.29
Metropolitan Area A	495.0	793.5	100.00	100.00	1.47	4.30	.16	.32
Metropolitan Area B	3,327.4	5,538.1	100.00	100.00	8.74	19.78	1.23	2.48
All other counties	3,327.5	9,866.4	100.00	100.00	24.95	41.37	.58	.70
Industry Groups								
Food and kindred products	4,351.9	9,795.9	100.00	100.00	18.72	41.59	1.06	1.74
Apparel and related products	35.3	41.1	100.00	100.00	26.35	70.07	.57	-----
Lumber and products, except furniture	20.8	21.8	100.00	100.00	20.19	83.94	.48‡	-----‡
Furniture and fixtures	48.0	68.0	100.00	100.00	25.62	80.88	2.08	3.68
Printing and publishing industries§	183.9	134.0	100.00	100.00	2.72	13.66	.49	3.81
Chemicals and allied products	499.3	1,369.2	100.00	100.00	18.07	22.20	.60	.74
Petroleum and coal products	103.5	219.8	100.00	100.00	-----	-----	-----	-----
Stone, clay, and glass products	804.5	2,821.6	100.00	100.00	18.05	19.13	-----	-----
Fabricated metal products	121.0	103.4	100.00	100.00	4.63	20.31	.08	-----
Machinery (except electrical)	191.2	226.4	100.00	100.00	6.28	22.00	1.83	5.61
Electrical machinery	89.7	72.3	100.00	100.00	5.35	21.72	.33	-----
Transportation equipment	85.4	103.8	100.00	100.00	1.99	5.01	.12	-----
Miscellaneous manufactures	65.1	74.9	100.00	100.00	17.82	66.49	1.54	-----
NORTH DAKOTA	1,033.8	3,089.0	100.00	100.00	39.03	85.92	2.25	1.97
Industry Groups								
Food and kindred products	873.8	2,906.3	100.00	100.00	42.49	87.72	2.61	2.01
Printing and publishing industries§	61.4	35.0	100.00	100.00	10.59	52.29	.49	7.14
Stone, clay, and glass products	46.8	67.3	100.00	100.00	14.10	35.07	-----	-----
Fabricated metal products	19.2	16.3	100.00	100.00	24.48	64.42	-----	-----
SOUTH DAKOTA	1,736.8	4,797.0	100.00	100.00	35.02	63.68	1.01	.85
Industry Groups								
Food and kindred products	1,113.9	2,423.3	100.00	100.00	25.94	38.71	.48	.63
Lumber and products, except furniture	78.9	53.3	100.00	100.00	6.08	14.82	-----‡	-----‡
Printing and publishing industries§	76.9	43.8	100.00	100.00	6.89	18.04	2.08	5.71
Chemicals and allied products	62.4	73.0	100.00	100.00	7.85	17.95	16.99	31.37
Stone, clay, and glass products	353.7	2,172.1	100.00	100.00	84.28	95.53	-----	-----
Machinery (except electrical)	43.7	26.0	100.00	100.00	11.67	40.38	-----	-----
KANSAS	16,773.9	64,421.6	100.00	100.00	8.99	13.82	1.65	1.89
Metropolitan Area A	1,482.8	3,329.9	100.00	100.00	.21	.39	.04	.08
Metropolitan Area B	4,379.9	13,535.6	100.00	100.00	6.84	12.12	.16	.15
All other counties	10,911.2	47,556.1	100.00	100.00	11.04	15.25	2.47	2.52

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
3.65	2.17	13.08	12.41	14.27	26.82	.11	.02	2.30	1.66	42.97	4.88
2.02	1.11	22.60	27.93	15.21	36.42	----	----	----	----	48.37	6.05
3.73	2.31	10.21	8.76	11.65	19.29	.02	----	4.76	3.52	42.78	4.67
4.60	2.60	11.18	8.32	17.71	31.82	.33	.07	.02	.01	39.67	4.47
1.05	.74	9.66	8.65	6.25	10.20	.32	.07	1.81	1.09	49.72	6.27
.45	.59	11.21	12.47	5.70	8.88	----	----	1.26	.88	56.32	7.76
.46	.92	10.83	24.80	3.95	11.77	.26	.14	.63	.78	73.84	12.59
-----‡	-----¶	13.37	12.59	5.71‡	15.16‡	-----‡	-----‡	.02‡	.01‡	54.83	5.14
.18	.48	6.62	10.72	4.88	8.62	----	----	6.86	8.86	63.94	10.62
----	----	30.41	48.61	8.39	20.29	-----	-----	1.01	1.09	52.03	6.79
.13	.34	5.28	12.26	9.41	39.61	.45	.28	4.13	6.46	74.62	15.51
.63	.31	13.13	9.98	13.04	18.51	----	----	3.88	2.98	30.09	2.32
----	----	19.62	14.46	38.53	58.64	----	----	.05	.02	23.46	1.51
----	----	1.15	5.53	.47	.77	----	----	.34	.77	92.82	52.57
.54	.56	2.49	2.76	1.45	2.18	.06	.02	.51	.39	62.61	5.89
2.06	.84	8.36	4.75	26.35	36.08	-----	-----	.10	.04	28.25	3.03
19.01	12.46	32.72	40.40	14.60	38.60	.06	.02	.78	.54	30.94	4.80
2.41	2.65	14.74	19.04	16.37	39.55	.15	.05	6.48	8.15	52.30	8.09
7.14	7.27	10.59	15.58	10.96	22.82	.06	.02	5.13	5.93	54.72	8.91
.01	-----	3.77	5.57	4.76	10.83	.06	.02	14.31	22.38	65.45	13.38
.45	.52	10.42	12.57	11.08	26.19	.03	.01	4.91	4.51	58.08	8.89
4.30	3.92	6.71	7.59	2.26	2.29	1.24	.36	2.55	1.74	52.81	5.38
.81	1.28	14.65	22.13	3.93	6.09	.13	.05	4.81	4.55	59.16	12.37
3.19	1.91	13.06	11.65	19.64	45.76	.33	.09	1.54	1.07	45.61	6.06
2.28	1.88	8.61	8.83	25.60	73.59	.67	.24	.53	.57	60.69	10.28
3.13	2.87	16.54	19.80	13.17	41.37	.13	.06	2.84	2.64	54.23	11.00
3.38	1.38	10.24	7.30	25.22	45.99	.49	.10	.38	.22	34.75	2.94
1.79	1.01	12.70	11.02	15.69	36.48	.42	.11	1.72	1.25	47.91	6.80
1.70	-----	7.37	9.00	5.10	11.92	.85	.49	2.55	3.65	55.52	4.87
-----‡	-----‡	3.37	5.50	-----‡	-----‡	.96‡	.92‡	-----‡	.46‡	75.00	9.17
----	----	4.17	5.44	-----	-----	----	----	1.25	1.47	66.88	8.53
.38	-----	6.09	13.43	10.60	43.36	.49	.45	4.24	10.00	74.99	15.30
.04	-----	7.01	4.75	35.71	67.28	.28	.10	.16	.09	38.13	4.83
----	----	57.68	75.30	9.66	20.43	----	----	.10	.09	32.56	4.19
----	----	18.00	12.39	39.98	65.75	----	----	.05	.02	23.93	2.71
.41	-----	17.11	32.40	6.86	28.05	1.57	1.06	.83	1.35	68.51	16.83
18.25	19.70	4.76	6.32	13.44	36.22	.16	.09	1.20	1.50	54.08	8.57
----	----	15.38	20.61	6.02	29.32	.22	.14	2.01	5.53	70.68	22.68
11.71	11.95	10.66	13.10	20.37	59.15	----	----	.59	.58	54.57	10.21
----	----	7.83	9.88	2.61	4.41	.46	.53	4.30	4.54	65.44	14.15
.26	.08	7.99	3.95	4.55	5.34	.79	.29	----	----	45.12	2.44
.07	-----	5.94	2.54	4.84	5.21	.32	.21	----	----	43.73	2.31
----	----	2.61	7.14	3.09	15.71	5.05	5.14	----	----	78.18	12.57
----	----	50.21	54.38	3.85	7.13	3.85	1.34	----	----	27.99	2.08
2.60	-----	16.15	26.38	----	----	.52	.61	----	----	56.25	8.59
.44	.21	11.04	8.45	12.37	23.64	1.44	.35	----	----	38.67	2.82
.66	.41	14.09	13.77	17.01	42.35	.47	.14	----	----	41.35	4.00
-----‡	-----¶	21.04	62.85	.38‡	.56‡	-----‡	-----¶	----	----	72.50	21.76
----	----	5.72	14.16	7.15	39.04	7.67	10.50	----	----	70.48	12.56
----	----	----	----	9.62	32.47	18.91	10.27	----	----	46.63	7.95
----	----	3.08	1.31	2.94	2.62	----	----	----	----	9.70	.53
.23	-----	5.26	11.92	6.18	29.23	4.58	3.85	----	----	72.08	14.62
1.83	.88	9.27	6.41	36.52	73.59	----	----	----	----	41.75	3.41
3.19	1.79	3.19	4.08	23.97	86.18	----	----	----	----	69.40	7.49
1.68	.77	20.51	18.95	26.18	63.41	----	----	----	----	44.62	4.60
1.70	.84	5.58	3.00	42.38	75.60	----	----	----	----	36.83	2.79

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
WEST NORTH CENTRAL—continued								
KANSAS—continued								
Industry Groups								
Food and kindred products	\$4,948.6	12,888.3	100.00	100.00	1.49	2.81	.16	.22
Apparel and related products	52.4	65.3	100.00	100.00	2.10	3.98	3.05	7.81
Lumber and products, except furniture	51.9	101.9	100.00	100.00	2.50	-----	9.83‡	32.38‡
Furniture and fixtures	50.3	62.9	100.00	100.00	24.06	24.96	.99	3.97
Paper and allied products	279.7	970.1	100.00	100.00	7.90	12.69	-----	-----
Printing and publishing industries§	216.9	216.9	100.00	100.00	.88	2.40	-----	-----
Chemicals and allied products	3,127.5	18,428.4	100.00	100.00	31.67	33.64	8.25	6.17
Petroleum and coal products	2,779.8	12,178.5	100.00	100.00	.04	.06	-----	-----
Stone, clay, and glass products	2,963.8	15,917.1	100.00	100.00	11.79	12.00	-----	-----
Primary metal industries	373.1	745.6	100.00	100.00	5.63	18.63	-----	-----
Fabricated metal products	302.9	429.0	100.00	100.00	1.45	4.27	.26	.58
Machinery (except electrical)	399.0	507.3	100.00	100.00	4.19	16.52	.43	1.50
Electrical machinery	82.2	68.3	100.00	100.00	.97	3.81	-----	-----
Transportation equipment	810.3	1,272.1	100.00	100.00	1.14	2.47	.07	.20
Miscellaneous manufactures	32.1	41.1	100.00	100.00	7.48	12.65	.31	-----
SOUTH ATLANTIC								
DELAWARE								
Metropolitan Area A	10,644.6	20,790.6	100.00	100.00	19.27	35.21	1.89	3.68
All other counties	9,062.1	17,656.1	100.00	100.00	18.09	33.33	2.06	4.07
Industry Groups								
Food and kindred products	736.3	1,060.5	100.00	100.00	20.75	48.42	2.05	4.31
Textile mill products	662.3	1,986.5	100.00	100.00	70.87	85.20	-----	-----
Apparel and related products	158.1	159.4	100.00	100.00	4.55	13.17	-----	-----
Lumber and products, except furniture	97.5	203.9	100.00	100.00	21.03	37.27	-----‡	-----
Paper and allied products	574.6	817.9	100.00	100.00	5.74	21.79	6.32	15.53
Printing and publishing industries§	53.3	29.3	100.00	100.00	-----	-----	1.88	-----
Chemicals and allied products	4,249.1	7,738.9	100.00	100.00	12.44	23.29	2.58	6.33
Leather and leather products	434.9	909.5	100.00	100.00	27.66	37.74	5.24	5.86
Stone, clay, and glass products	103.8	214.3	100.00	100.00	33.24	51.33	.39	-----
Primary metal industries	2,057.1	5,227.5	100.00	100.00	29.45	43.70	.42	.53
Fabricated metal products	278.1	303.0	100.00	100.00	10.50	33.73	.61	.83
Machinery (except electrical)	216.1	253.6	100.00	100.00	3.98	11.36	.69	2.01
Transportation equipment	250.6	363.9	100.00	100.00	8.06	20.17	-----	-----
Miscellaneous manufactures	327.6	640.1	100.00	100.00	3.51	9.83	.15	.39
MARYLAND								
Metropolitan Area A	73,466.7	161,636.7	100.00	100.00	12.67	23.04	1.39	2.55
Metropolitan Area B	62,960.5	134,727.0	100.00	100.00	6.46	10.80	1.29	2.53
All other counties	427.1	734.4	100.00	100.00	20.07	46.02	2.01	3.80
Industry Groups								
Food and kindred products	5,563.3	11,105.9	100.00	100.00	22.60	38.69	10.79	25.78
Textile mill products	654.8	1,300.0	100.00	100.00	43.22	86.46	1.22	1.95
Apparel and related products	702.5	459.7	100.00	100.00	5.49	27.93	1.95	7.74
Lumber and products, except furniture	214.6	266.0	100.00	100.00	18.08	56.13	.51‡	.94‡
Furniture and fixtures	163.5	138.3	100.00	100.00	9.79	37.89	.31	-----
Paper and allied products	2,427.2	8,869.5	100.00	100.00	78.72	95.53	.03	.03
Printing and publishing industries§	512.6	335.6	100.00	100.00	9.91	39.81	.37	1.52
Chemicals and allied products	7,130.7	16,351.9	100.00	100.00	41.22	73.46	.25	.61
Petroleum and coal products	601.1	1,678.4	100.00	100.00	1.28	1.41	.28	.30
Rubber products	1,291.8	2,070.6	100.00	100.00	31.47	82.50	.37	.61
Leather and leather products	192.6	406.3	100.00	100.00	42.21	65.12	-----	-----
Stone, clay, and glass products	3,875.8	9,737.2	100.00	100.00	35.49	56.94	2.23	3.29
Primary metal industries	43,217.5	101,006.4	100.00	100.00	.52	.88	.57	.66
Fabricated metal products	3,065.7	3,617.8	100.00	100.00	8.82	26.29	.44	.63
Machinery (except electrical)	691.1	618.4	100.00	100.00	5.86	22.46	.38	.82
Electrical machinery	512.6	637.1	100.00	100.00	14.73	50.59	.80	1.60
Transportation equipment	2,347.9	2,738.9	100.00	100.00	9.99	30.71	.55	1.39
Instruments and related products	45.8	28.6	100.00	100.00	1.09	9.09	.22	-----
Miscellaneous manufactures	252.3	268.0	100.00	100.00	23.03	68.43	1.74	3.81

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.01	.02	8.72	9.07	29.68	80.68	----	----	----	----	59.94	7.20
----	----	5.92	6.58	17.94	74.89	----	----	----	----	70.99	6.74
----‡	----‡	1.54	1.86	15.99‡	59.37‡	----	----	----	----	70.13	6.38
----	----	11.53	22.73	8.75	39.59	----	----	----	----	54.67	8.74
----	----	9.33	4.28	42.04	79.13	----	----	----	----	40.72	3.91
----	----	1.84	4.01	16.23	81.65	----	----	----	----	81.05	11.94
2.19	1.32	3.97	1.90	36.55	56.02	----	----	----	----	17.37	.95
----	----	4.08	1.60	56.04	94.49	----	----	----	----	39.84	3.84
----	----	20.45	10.81	48.86	76.28	----	----	----	----	18.89	.92
44.87	29.94	22.17	30.69	6.97	18.92	----	----	----	----	20.37	1.82
2.61	3.47	10.53	16.62	12.97	63.36	----	----	----	----	72.17	11.70
12.78	13.21	2.41	4.89	15.74	55.94	----	----	----	----	64.46	7.94
----	----	5.96	14.49	10.83	55.78	----	----	----	----	82.24	25.92
1.39	1.17	9.32	15.45	17.55	67.71	----	----	----	----	70.53	13.01
----	----	2.49	4.62	19.00	76.16	----	----	----	----	70.72	6.57
1.60	2.35	48.99	53.89	----	----	.95	.52	----	----	27.30	4.35
1.82	2.71	50.34	54.93	----	----	1.04	.58	----	----	26.66	4.37
.33	.32	41.28	48.03	----	----	.41	.17	----	----	31.00	4.22
----	----	26.13	38.70	----	----	.80	.43	----	----	50.26	8.14
.12	.13	18.71	13.92	----	----	.38	.16	----	----	9.92	.60
----	----	38.39	74.66	----	----	.57	.38	----	----	56.48	11.79
----‡	----‡	51.79	60.23	----	----	----‡	----‡	----	----	27.18	2.50
----	----	26.11	45.41	----	----	----	----	----	----	61.83	17.28
----	----	22.14	72.01	----	----	5.25	7.17	----	----	70.73	20.82
.39	2.95	62.73	62.75	----	----	.42	.19	----	----	21.44	4.49
----	----	46.31	54.26	----	----	.74	.23	----	----	20.05	1.91
4.24	3.45	44.80	43.96	----	----	----	----	----	----	17.34	1.26
5.52	3.80	47.98	49.43	----	----	1.02	.54	----	----	15.61	2.00
.07	----	22.94	44.39	----	----	7.30	7.43	----	----	58.58	13.63
16.01	20.54	27.63	53.31	----	----	3.38	2.96	----	----	48.31	9.82
.04	----	46.17	72.93	----	----	.92	.52	----	----	44.81	6.38
----	----	63.03	82.33	----	----	4.58	3.19	----	----	28.72	4.26
36.12	37.89	19.30	22.01	.18	.22	6.31	10.69	----	----	24.02	3.59
41.74	45.06	21.30	25.34	----	----	7.26	12.79	----	----	21.96	3.49
----	----	36.27	41.20	1.99	2.55	2.62	1.32	----	----	37.04	5.11
2.56	2.07	6.09	4.34	1.26	1.28	.58	.19	----	----	36.37	4.10
----	----	24.90	29.20	.29	.33	4.15	1.84	----	----	37.26	4.17
----	----	5.80	5.53	.12	.12	.12	.06	----	----	49.51	5.88
.37	1.09	13.28	34.26	----	----	5.75	7.83	----	----	73.15	21.14
----‡	----‡	25.40	35.68	----‡	----‡	.37‡	.19‡	----	----	55.64	7.07
----	----	21.77	47.51	.49	.65	.86	.65	----	----	66.79	13.30
.54	.31	3.77	2.34	.33	.22	.18	.04	----	----	16.44	1.55
.57	1.49	7.78	25.30	.25	.77	10.96	13.53	----	----	70.15	17.58
.08	.05	14.80	16.72	1.36	1.63	4.27	1.83	----	----	38.01	5.71
----	----	8.72	7.76	----	----	39.96	83.74	----	----	49.76	6.79
----	----	3.48	3.65	.02	.02	.05	.02	----	----	64.62	13.20
----	----	24.87	31.75	----	----	1.09	.44	----	----	31.83	2.68
5.90	4.64	33.53	30.26	.28	.27	4.67	2.68	----	----	18.80	1.93
60.31	59.79	19.99	22.43	----	----	6.18	13.96	----	----	12.43	2.28
5.70	7.13	19.34	37.12	----	----	19.30	17.27	----	----	46.40	11.56
10.33	15.64	12.72	34.09	.01	.02	8.78	9.31	----	----	61.92	17.66
----	----	17.19	29.38	----	----	8.27	5.84	----	----	59.01	12.59
.34	.45	21.55	43.55	----	----	7.94	6.78	----	----	59.64	17.12
----	----	17.03	58.39	----	----	6.77	8.74	----	----	74.89	23.78
----	----	6.50	10.86	----	----	6.94	5.56	----	----	61.79	11.34

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
SOUTH ATLANTIC—continued								
DISTRICT OF COLUMBIA	\$ 1,503.7	2,159.2	100.00	100.00	13.09	25.00	1.31	2.35
Industry Groups								
Food and kindred products	860.0	1,207.8	100.00	100.00	8.45	16.05	.70	1.05
Paper and allied products	103.8	205.9	100.00	100.00	49.71	76.35	-----	-----
Printing and publishing industries§	250.7	214.4	100.00	100.00	12.72	39.09	1.80	7.09
Chemicals and allied products	26.6	39.0	100.00	100.00	20.30	40.26	23.68	38.97
Stone, clay, and glass products	201.1	446.7	100.00	100.00	16.56	18.76	.05	-----
Fabricated metal products	30.2	25.3	100.00	100.00	4.97	20.55	4.97	9.88
VIRGINIA	47,793.4	119,162.4	100.00	100.00	53.84	80.45	.85	.95
Metropolitan Area A	1,916.2	4,962.0	100.00	100.00	63.15	89.50	1.64	2.61
Metropolitan Area B**	235.2	200.0	100.00	100.00	12.20	39.30	.60	-----
Metropolitan Area C	3,520.9	6,846.8	100.00	100.00	47.40	83.57	.41	.67
Metropolitan Area D	2,735.3	4,368.4	100.00	100.00	30.10	64.77	.54	1.40
All other counties	39,385.8	102,785.2	100.00	100.00	55.86	80.55	.88	.88
Industry Groups								
Food and kindred products	2,957.6	3,532.7	100.00	100.00	21.24	58.96	2.06	5.97
Tobacco manufactures	1,167.9	2,552.3	100.00	100.00	61.07	90.44	2.71	3.58
Textile mill products	4,294.1	7,593.0	100.00	100.00	41.53	84.43	.99	1.81
Apparel and related products	577.2	859.4	100.00	100.00	35.45	77.14	.62	1.48
Lumber and products, except furniture	956.3	1,479.2	100.00	100.00	23.51	54.02	.42‡	.86‡
Furniture and fixtures	633.3	810.4	100.00	100.00	25.58	75.65	2.64	6.27
Paper and allied products	7,130.4	23,430.1	100.00	100.00	82.31	95.56	-----	-----
Printing and publishing industries§	295.2	200.3	100.00	100.00	11.21	47.08	1.52	8.89
Chemicals and allied products	21,773.0	62,528.3	100.00	100.00	61.42	80.17	-----	-----
Petroleum and coal products	42.3	51.4	100.00	100.00	3.55	10.12	-----	-----
Leather and leather products	302.8	739.9	100.00	100.00	62.12	96.68	.13	-----
Stone, clay, and glass products	2,654.3	7,686.2	100.00	100.00	66.97	91.49	2.72	3.21
Primary metal industries	2,482.4	4,300.4	100.00	100.00	8.79	18.16	5.87	6.26
Fabricated metal products	704.5	715.8	100.00	100.00	10.96	36.60	.37	1.42
Machinery (except electrical)	114.0	116.2	100.00	100.00	13.07	40.62	.70	2.15
Transportation equipment	1,370.4	2,141.1	100.00	100.00	28.15	59.72	.03	-----
Miscellaneous manufactures	113.9	139.3	100.00	100.00	23.70	60.16	.70	1.79
WEST VIRGINIA	65,026.6	240,821.5	100.00	100.00	26.86	43.24	.15	.20
Metropolitan Area A	25,555.4	100,187.5	100.00	100.00	14.19	28.02	.05	.06
Metropolitan Area B	2,966.1	7,325.2	100.00	100.00	5.67	11.62	.58	1.14
Metropolitan Area C**	18,971.1	76,804.8	100.00	100.00	40.52	56.15	.03	.04
All other counties	17,534.0	56,504.0	100.00	100.00	34.15	56.76	.37	.52
Industry Groups								
Food and kindred products	862.1	1,591.9	100.00	100.00	23.19	56.28	.53	1.28
Textile mill products	355.8	1,149.0	100.00	100.00	62.17	96.22	-----	-----
Apparel and related products	53.4	56.8	100.00	100.00	8.99	32.22	1.12	4.40
Lumber and products, except furniture	432.2	1,085.6	100.00	100.00	39.89	73.85	3.38‡	6.55‡
Furniture and fixtures	42.0	46.9	100.00	100.00	16.90	66.95	-----	-----
Paper and allied products	295.9	761.8	100.00	100.00	56.54	92.52	-----	-----
Printing and publishing industries§	127.3	108.8	100.00	100.00	5.34	24.08	.16	-----
Chemicals and allied products	19,072.0	81,096.4	100.00	100.00	51.61	70.75	-----	-----
Petroleum and coal products	1,841.5	5,792.9	100.00	100.00	11.36	19.99	-----	-----
Leather and leather products	300.9	1,163.2	100.00	100.00	80.66	97.98	-----	-----
Stone, clay, and glass products	11,571.2	39,335.1	100.00	100.00	21.37	27.40	.07	.13
Primary metal industries	24,643.8	100,269.2	100.00	100.00	14.37	27.97	.25	.28
Fabricated metal products	1,103.9	2,841.8	100.00	100.00	23.48	50.06	.63	1.07
Machinery (except electrical)	282.5	418.4	100.00	100.00	10.44	32.55	.07	-----
Electrical machinery	3,479.1	4,092.1	100.00	100.00	1.16	5.19	.08	.25
Miscellaneous manufactures	97.5	188.6	100.00	100.00	12.10	29.16	-----	-----
NORTH CAROLINA	43,478.4	74,557.1	100.00	100.00	38.19	76.29	1.98	3.94
Metropolitan Area A	1,936.5	5,514.6	100.00	100.00	73.24	94.26	1.66	1.98
Metropolitan Area B	1,749.4	4,029.8	100.00	100.00	62.43	91.67	.24	.38
Metropolitan Area C	3,103.7	5,948.2	100.00	100.00	49.43	86.64	.77	1.28
Metropolitan Area D	1,987.3	2,766.6	100.00	100.00	28.65	68.85	1.33	4.04
Metropolitan Area E	364.5	467.6	100.00	100.00	21.56	53.23	2.39	15.21
All other counties	34,337.0	55,829.8	100.00	100.00	34.69	72.86	2.22	4.58

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
----	----	34.60	54.76	1.86	1.34	----	----	7.81	8.42	41.34	8.14
----	----	37.84	60.88	2.06	1.49	----	----	10.60	11.88	40.35	8.64
----	----	15.32	15.98	----	----	----	----	.96	.87	34.01	6.80
----	----	7.46	16.46	2.55	3.12	----	----	8.74	14.51	66.73	19.73
----	----	8.65	9.49	4.51	3.85	----	----	1.13	1.28	41.73	6.15
----	----	72.85	80.08	.05	.02	----	----	.10	.07	10.39	1.07
----	----	21.19	39.13	6.62	7.51	----	----	4.30	7.91	57.95	15.02
15.54	11.11	4.80	3.79	.27	.24	.79	.26	----	----	23.90	3.21
3.06	1.90	4.05	2.70	----	----	2.69	.83	----	----	25.40	2.47
16.75	26.05	4.63	9.90	3.32	5.30	----	----	----	----	62.50	19.45
2.90	2.07	6.56	6.32	----	----	4.79	2.27	----	----	37.93	5.10
4.13	4.03	14.16	20.61	----	----	2.61	1.25	----	----	48.44	7.94
18.06	12.42	4.03	2.94	.30	.27	.22	.06	----	----	20.64	2.88
.24	.42	11.75	18.02	.60	.69	6.31	4.34	----	----	57.81	11.60
----	----	1.57	1.70	----	----	.23	.07	----	----	34.43	4.21
----	----	2.10	1.87	.15	.13	.32	.15	----	----	54.91	11.61
.14	----	9.11	11.40	.28	.26	.74	.36	----	----	53.66	9.37
----	----	35.68	40.37	----	----	----	----	----	----	40.40	4.75
----	----	4.44	4.13	----	----	.27	.14	----	----	67.08	13.81
----	----	4.67	2.97	----	----	.03	.01	----	----	12.99	1.46
----	----	6.81	17.02	1.39	2.80	7.66	8.39	----	----	71.41	15.83
25.05	16.00	2.27	1.64	.32	.32	.01	----	----	----	10.93	1.86
----	----	52.48	83.27	----	----	----	----	----	----	43.97	6.61
----	----	----	----	.10	.04	.03	.01	----	----	37.62	3.27
1.69	.90	3.12	1.80	.05	.02	.95	.26	----	----	24.50	2.32
70.23	67.18	7.46	7.29	.01	.01	.27	.08	----	----	7.36	1.02
15.53	21.49	8.57	15.51	1.11	1.77	9.57	9.71	----	----	53.90	13.50
19.74	32.01	7.72	13.34	.79	1.12	3.77	2.50	----	----	54.21	8.26
3.23	3.01	14.89	26.61	----	----	.07	.03	----	----	53.64	10.63
----	----	6.41	9.76	15.89	18.52	4.65	2.66	----	----	48.64	7.11
21.35	19.19	4.77	2.64	15.04	17.82	2.11	1.56	11.37	13.18	18.34	2.19
32.00	30.93	10.82	5.81	5.97	4.29	2.89	2.36	25.12	27.66	8.95	.87
2.17	1.39	.78	.55	46.53	79.30	----	----	----	----	44.27	5.99
15.51	13.26	.23	.13	20.18	25.85	2.82	1.58	----	----	20.72	2.98
15.40	8.73	1.55	.69	17.37	22.90	.56	.33	5.54	7.12	25.06	2.95
.56	2.18	4.63	4.44	15.54	29.22	.79	.25	----	----	54.76	6.34
----	----	.59	.27	.79	.57	----	----	----	----	36.45	2.94
----	----	----	----	14.61	51.23	.19	.18	----	----	75.09	11.97
----	----	27.19	16.85	.58‡	.90‡	----	----	----	----	28.97	1.85
----	----	----	----	6.19	20.68	----	----	----	----	76.90	12.37
----	----	----	----	2.40	3.58	----	----	----	----	41.06	3.90
----	----	1.96	3.40	16.34	59.56	1.96	1.38	----	----	74.23	11.58
15.35	12.54	.23	.13	9.60	12.40	2.53	1.29	----	----	20.68	2.89
----	----	1.05	.64	20.41	31.55	44.30	44.71	----	----	22.89	3.11
----	----	----	----	1.16	1.02	----	----	----	----	18.18	1.00
2.71	1.69	2.22	.87	46.97	59.29	.53	.30	6.54	8.35	19.58	1.99
36.11	32.99	10.50	5.55	5.59	4.88	----	----	26.05	27.64	7.13	.69
1.23	1.57	1.18	.68	28.35	42.25	----	----	----	----	45.12	4.37
10.62	11.85	3.36	2.96	18.83	45.05	----	----	----	----	56.67	7.58
46.94	50.36	.03	.03	2.18	6.36	.10	.04	6.18	18.09	43.34	19.68
----	----	.92	.64	37.54	64.79	.51	.16	----	----	48.92	5.25
.61	.55	5.36	5.62	----	----	.63	.27	----	----	53.24	13.33
.11	.05	1.73	.81	----	----	.21	.05	----	----	23.05	2.86
.73	.49	4.03	2.37	----	----	1.83	.62	----	----	30.74	4.47
.85	.63	3.61	2.83	----	----	.60	.26	----	----	44.73	8.36
5.76	6.18	4.56	4.64	----	----	3.37	1.89	----	----	56.33	14.40
.11	----	11.99	14.59	----	----	3.48	1.73	----	----	60.47	15.25
.31	.32	5.77	6.60	----	----	.41	.18	----	----	56.60	15.47

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
SOUTH ATLANTIC—continued								
NORTH CAROLINA—continued								
Industry Groups								
Food and kindred products	\$ 2,292.4	2,267.5	100.00	100.00	15.19	47.95	1.61	5.15
Tobacco manufactures	2,162.7	5,808.0	100.00	100.00	70.13	92.43	.62	.66
Textile mill products	22,959.6	30,872.0	100.00	100.00	28.84	71.90	2.07	5.89
Apparel and related products	654.9	1,005.0	100.00	100.00	38.75	80.56	.55	.51
Lumber and products, except furniture	1,420.8	1,682.3	100.00	100.00	12.02	36.44	.02‡	----‡
Furniture and fixtures	1,389.4	1,851.8	100.00	100.00	28.13	70.18	6.46	14.81
Paper and allied products	4,851.4	14,755.8	100.00	100.00	75.93	88.90	----	----
Printing and publishing industries§	257.1	212.5	100.00	100.00	11.09	35.76	2.41	29.88
Chemicals and allied products	2,265.0	5,932.2	100.00	100.00	67.43	92.66	1.52	1.67
Leather and leather products	299.6	822.4	100.00	100.00	67.56	86.98	12.35	11.11
Stone, clay, and glass products	2,567.2	6,211.0	100.00	100.00	63.96	86.26	5.56	5.85
Primary metal industries	1,529.3	2,173.1	100.00	100.00	4.80	11.21	.26	.47
Fabricated metal products	213.2	301.1	100.00	100.00	26.69	60.05	.14	----
Machinery (except electrical)	260.3	233.7	100.00	100.00	7.41	21.31	2.30	7.62
Electrical machinery	165.2	159.2	100.00	100.00	12.29	64.20	----	----
Transportation equipment	62.5	64.1	100.00	100.00	17.44	36.82	7.36	31.67
Miscellaneous manufactures	41.8	55.2	100.00	100.00	17.70	38.04	12.20	36.78
SOUTH CAROLINA	28,157.7	50,663.6	100.00	100.00	39.48	72.06	.40	.74
Metropolitan Area A	1,084.7	1,381.8	100.00	100.00	32.03	73.57	.56	1.47
Metropolitan Area B	928.7	1,456.9	100.00	100.00	48.10	81.10	----	----
Metropolitan Area C	2,399.1	5,522.4	100.00	100.00	37.08	56.60	.22	.23
All other counties	23,745.2	42,302.6	100.00	100.00	39.72	73.71	.43	.81
Industry Groups								
Food and kindred products	1,110.9	1,111.4	100.00	100.00	15.74	44.79	2.33	10.28
Tobacco manufactures	55.2	93.0	100.00	100.00	51.63	93.01	----	----
Textile mill products	17,737.5	29,033.5	100.00	100.00	39.89	81.71	.36	.66
Apparel and related products	665.2	1,461.8	100.00	100.00	53.65	88.54	1.34	2.09
Lumber and products, except furniture	1,222.6	1,516.1	100.00	100.00	14.27	38.88	----‡	----‡
Furniture and fixtures	142.2	96.3	100.00	100.00	4.36	24.51	1.48	5.30
Paper and allied products	4,221.6	12,045.4	100.00	100.00	49.58	55.25	----	----
Printing and publishing industries§	81.3	55.4	100.00	100.00	9.84	47.29	3.57	13.72
Chemicals and allied products	679.0	837.5	100.00	100.00	23.30	60.38	.01	----
Stone, clay, and glass products	1,400.2	3,297.9	100.00	100.00	69.10	87.23	.45	.54
Primary metal industries	607.2	905.1	100.00	100.00	7.89	17.08	.48	1.13
Machinery (except electrical)	98.3	118.9	100.00	100.00	7.93	22.04	----	----
Transportation equipment	74.1	47.4	100.00	100.00	9.45	49.79	----	----
Miscellaneous manufactures	21.2	11.7	100.00	100.00	14.15	44.44	1.89	----
GEORGIA	29,864.4	52,659.9	100.00	100.00	21.28	41.98	.75	1.53
Metropolitan Area A	470.9	1,112.3	100.00	100.00	46.40	87.15	.02	----
Metropolitan Area B	4,677.7	8,449.0	100.00	100.00	11.12	22.05	.49	1.02
Metropolitan Area C	1,804.3	2,385.4	100.00	100.00	13.67	35.15	.08	.21
Metropolitan Area D	1,734.1	2,924.1	100.00	100.00	32.17	54.21	.31	.43
Metropolitan Area E	3,605.3	9,046.1	100.00	100.00	16.83	23.87	.01	----
All other counties	17,572.1	28,743.1	100.00	100.00	23.93	51.12	1.11	2.45
Industry Groups								
Food and kindred products	3,898.3	6,434.8	100.00	100.00	17.12	36.52	1.32	3.28
Textile mill products	11,379.5	14,532.6	100.00	100.00	22.05	59.53	.57	1.66
Apparel and related products	673.0	1,024.9	100.00	100.00	19.90	44.48	4.15	7.93
Lumber and products, except furniture	1,887.0	2,505.2	100.00	100.00	12.04	32.63	----‡	----‡
Furniture and fixtures	268.4	333.9	100.00	100.00	22.84	65.92	1.01	3.05
Paper and allied products	2,958.7	8,229.8	100.00	100.00	11.36	14.29	.35	.49
Printing and publishing industries§	250.8	184.5	100.00	100.00	5.26	18.48	1.00	5.53
Chemicals and allied products	2,146.4	4,481.0	100.00	100.00	35.41	63.15	2.19	3.63
Petroleum and coal products	171.2	307.7	100.00	100.00	.35	.84	----	----
Leather and leather products	125.2	244.6	100.00	100.00	55.59	92.11	1.20	1.02
Stone, clay, and glass products	3,628.6	9,856.9	100.00	100.00	40.34	50.40	.24	.23
Primary metal industries	1,029.5	2,503.1	100.00	100.00	2.88	3.77	----	----
Fabricated metal products	247.3	265.3	100.00	100.00	7.56	23.71	.36	.94
Machinery (except electrical)	654.8	955.4	100.00	100.00	5.27	11.80	.11	.26
Electrical machinery	166.8	173.1	100.00	100.00	6.35	27.27	----	----
Transportation equipment	252.1	440.2	100.00	100.00	3.57	6.54	----	----
Miscellaneous manufactures	83.2	113.9	100.00	100.00	5.17	11.50	.24	----

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.35	.55	15.13	23.68	----	----	7.16	5.19	----	----	60.56	17.49
----	----	5.29	3.95	----	----	.06	.02	----	----	23.90	2.94
.01	.02	1.35	1.57	----	----	.04	.02	----	----	67.69	20.61
.12	----	2.35	3.33	----	----	.67	.29	----	----	57.55	15.31
-----‡	-----‡	40.11	52.45	----	----	.39‡	.22‡	----	----	47.46	10.89
.02	.14	.51	.80	----	----	.28	.27	----	----	64.60	13.80
----	----	12.94	9.57	----	----	.05	.01	----	----	11.08	1.51
.23	1.18	3.89	7.01	----	----	9.88	8.80	----	----	72.50	17.36
.61	.42	3.05	2.45	----	----	.21	.05	----	----	27.17	2.75
----	----	----	----	----	----	----	----	----	----	20.09	1.91
.10	.08	6.45	4.47	----	----	.06	.02	----	----	23.87	3.32
9.49	10.16	1.48	1.97	----	----	.10	.10	----	----	83.86	76.09
15.10	16.47	11.44	13.38	----	----	7.04	3.99	----	----	39.59	6.11
20.82	35.00	11.18	16.73	----	----	3.88	5.31	----	----	54.40	14.04
.42	----	3.39	5.46	----	----	9.56	5.90	----	----	74.33	24.43
----	----	7.36	14.51	----	----	4.00	2.65	----	----	63.84	14.35
3.83	9.06	2.15	2.17	----	----	15.31	7.79	----	----	48.80	6.16
.64	.78	10.71	14.28	----	----	.32	.12	----	----	48.45	12.03
.26	.36	4.07	4.89	----	----	1.18	.74	----	----	61.91	18.97
----	----	7.49	7.83	----	----	.33	.10	----	----	44.07	10.96
4.14	4.54	22.40	28.53	----	----	.49	.16	----	----	35.67	9.95
.33	.33	9.96	12.95	----	----	.26	.09	----	----	49.30	12.11
.60	1.12	13.09	23.10	----	----	3.38	2.41	----	----	64.86	18.30
----	----	----	----	----	----	1.27	.43	----	----	47.10	6.56
.01	.01	.90	1.00	----	----	.10	.04	----	----	58.75	16.59
----	----	3.28	2.08	----	----	.44	.12	----	----	41.30	7.17
-----‡	-----‡	46.62	52.67	----	----	-----‡	-----‡	----	----	39.11	8.44
----	----	15.12	36.66	----	----	.21	.21	----	----	78.83	33.33
.02	.02	43.82	43.73	----	----	.03	----	----	----	6.54	1.00
.12	----	4.67	11.19	----	----	9.47	9.39	----	----	72.32	18.41
.81	1.78	9.65	22.95	----	----	.06	.02	----	----	66.17	14.87
.05	.08	10.49	9.46	----	----	.99	.24	----	----	18.91	2.45
21.28	32.33	.99	1.30	----	----	.18	.09	----	----	69.19	48.07
37.03	56.35	9.46	12.03	----	----	1.73	1.01	----	----	43.85	8.58
.27	----	10.39	23.63	----	----	.54	.63	----	----	79.35	25.95
.47	----	13.21	26.50	----	----	5.66	5.98	----	----	64.62	23.08
1.42	1.41	19.57	26.35	6.20	18.34	.20	.06	----	----	50.59	10.32
----	----	4.61	3.12	----	----	----	----	----	----	48.97	9.73
5.17	5.28	9.69	11.01	18.63	51.93	----	----	----	----	54.90	8.70
1.80	2.29	2.66	2.96	9.07	36.74	----	----	----	----	72.72	22.65
.32	.25	27.50	36.79	.08	.08	.67	.26	----	----	38.97	7.98
.36	.27	64.43	73.54	----	----	.21	.05	----	----	18.15	2.27
.74	.72	14.35	17.79	4.63	15.27	.22	.08	----	----	55.02	12.57
.64	.96	20.10	30.87	6.53	18.93	.62	.23	----	----	53.66	9.21
-----‡	-----‡	.57	.79	3.09	13.08	.03	.01	----	----	73.70	24.93
----	----	5.57	6.17	10.04	32.64	.22	.09	----	----	60.12	8.69
-----‡	-----‡	58.92	63.06	.04‡	.14‡	-----‡	-----‡	----	----	29.01	4.17
----	----	2.91	4.46	4.88	15.30	.63	.33	----	----	67.73	10.93
----	----	79.73	81.93	1.22	2.53	----	----	----	----	7.33	.75
----	----	1.20	4.39	10.01	51.44	3.07	2.38	----	----	79.47	17.78
2.52	2.60	7.72	8.34	6.34	16.43	-----‡	-----‡	----	----	45.82	5.85
----	----	57.94	91.06	----	----	----	----	----	----	41.71	8.09
----	----	.08	-----‡	.72	1.84	.56	.16	----	----	41.85	4.87
.71	.45	24.30	21.03	12.57	25.17	.38	.08	----	----	21.46	2.64
13.99	9.41	21.26	17.36	27.92	65.16	----	----	----	----	33.96	4.29
24.67	37.39	2.55	5.62	6.31	21.15	1.50	.79	----	----	57.06	10.40
15.53	17.40	9.54	11.23	16.33	49.46	.12	.04	----	----	53.10	9.82
3.54	4.28	5.16	6.07	12.95	41.31	----	----	----	----	72.00	21.09
2.14	2.25	11.94	15.77	21.02	63.58	----	----	----	----	61.32	11.86
----	----	.84	.53	23.32	76.03	1.44	.53	----	----	68.99	11.41

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
SOUTH ATLANTIC—continued								
FLORIDA	\$13,485.8	24,230.2	100.00	100.00	3.09	5.82	.19	.26
Metropolitan Area A	2,021.6	3,054.9	100.00	100.00	4.14	8.84	.14	.25
Metropolitan Area B	2,607.0	4,293.4	100.00	100.00	1.39	2.20	.72	1.12
Metropolitan Area C	923.7	513.1	100.00	100.00	.96	6.12	----	----
All other counties	7,933.5	16,368.6	100.00	100.00	3.63	6.19	.05	.05
Industry Groups								
Food and kindred products	4,801.0	5,171.6	100.00	100.00	.84	2.33	.12	.25
Tobacco manufactures	173.3	90.7	100.00	100.00	.69	2.37	2.60	19.63
Apparel and related products	41.1	15.4	100.00	100.00	2.92	16.88	----	----
Lumber and products, except furniture	641.3	998.8	100.00	100.00	24.06	50.63	----†	----†
Furniture and fixtures	86.9	35.4	100.00	100.00	5.75	37.01	----	----
Paper and allied products	3,955.1	11,385.8	100.00	100.00	3.10	4.21	----	----
Printing and publishing industries§	360.1	78.2	100.00	100.00	.19	3.32	.06	----
Chemicals and allied products	1,474.3	2,748.1	100.00	100.00	.77	1.05	----	----
Stone, clay, and glass products	1,207.7	3,233.8	100.00	100.00	5.35	6.64	----	----
Primary metal industries	55.3	47.8	100.00	100.00	----	----	1.45	5.23
Fabricated metal products	160.5	65.0	100.00	100.00	1.25	8.00	.06	----
Machinery (except electrical)	84.8	53.5	100.00	100.00	----	----	.83	4.67
Electrical machinery	27.7	7.6	100.00	100.00	----	----	----	----
Transportation equipment	312.9	182.0	100.00	100.00	3.74	15.82	4.31	15.33
Miscellaneous manufactures	69.5	70.1	100.00	100.00	2.45	7.42	----	----
EAST SOUTH CENTRAL								
KENTUCKY	30,840.3	77,397.0	100.00	100.00	26.29	51.51	.45	.72
Metropolitan Area A	13,654.2	30,122.1	100.00	100.00	28.70	67.42	.35	.64
Metropolitan Area B	3,399.0	8,873.6	100.00	100.00	32.64	55.01	.48	.57
Metropolitan Area C	7,966.4	21,741.3	100.00	100.00	5.21	10.01	----	----
All other counties	5,820.7	16,660.0	100.00	100.00	45.80	75.05	1.27	1.89
Industry Groups								
Food and kindred products	5,889.7	18,404.4	100.00	100.00	60.32	92.49	.49	.46
Tobacco manufactures	738.4	2,096.5	100.00	100.00	54.32	91.73	1.02	.85
Textile mill products	341.9	721.7	100.00	100.00	38.08	87.49	3.01	4.93
Apparel and related products	244.7	315.5	100.00	100.00	20.47	63.93	1.10	3.23
Lumber and products, except furniture	909.9	1,839.6	100.00	100.00	37.04	80.75	.01†	----†
Furniture and fixtures	510.1	1,175.9	100.00	100.00	35.80	86.90	.63	1.73
Paper and allied products	59.3	137.3	100.00	100.00	36.59	80.12	----	----
Printing and publishing industries§	319.4	304.1	100.00	100.00	4.01	13.78	.34	----
Chemicals and allied products	4,726.3	7,553.0	100.00	100.00	12.91	49.40	----	----
Petroleum and coal products	1,002.4	2,436.3	100.00	100.00	22.02	46.14	.02	----
Leather and leather products	169.5	496.1	100.00	100.00	58.23	92.94	----	----
Stone, clay, and glass products	2,235.6	8,299.9	100.00	100.00	41.03	57.86	2.83	3.46
Primary metal industries	10,680.9	28,030.5	100.00	100.00	10.84	18.44	.17	.33
Fabricated metal products	1,285.1	2,430.2	100.00	100.00	13.01	33.96	.10	.10
Machinery (except electrical)	1,033.7	1,914.0	100.00	100.00	16.08	46.54	.09	.13
Electrical machinery	190.0	200.7	100.00	100.00	1.53	5.23	----	----
Miscellaneous manufactures	80.8	94.9	100.00	100.00	18.19	60.70	.37	2.63
TENNESSEE	46,426.0	120,018.4	100.00	100.00	36.27	66.19	.38	.49
Metropolitan Area A	4,191.5	10,997.4	100.00	100.00	8.45	14.58	.44	.81
Metropolitan Area B	3,449.4	13,820.4	100.00	100.00	60.73	90.96	.32	.33
Metropolitan Area C	6,713.2	15,226.3	100.00	100.00	32.94	65.20	.70	1.05
Metropolitan Area D**	2,689.1	7,407.6	100.00	100.00	55.70	88.03	1.10	.93
All other counties	29,382.8	72,566.7	100.00	100.00	36.35	67.28	.24	.30
Industry Groups								
Food and kindred products	3,275.4	7,163.1	100.00	100.00	29.08	61.23	1.80	2.80
Tobacco manufactures	131.3	479.9	100.00	100.00	76.09	98.27	.46	.52
Textile mill products	2,510.3	5,663.3	100.00	100.00	38.14	72.26	.71	1.12
Apparel and related products	372.1	470.6	100.00	100.00	20.64	62.92	1.48	3.23
Lumber and products, except furniture	928.2	1,531.8	100.00	100.00	23.11	57.47	.10†	.16†
Furniture and fixtures	332.1	488.5	100.00	100.00	25.72	69.19	.69	2.60
Paper and allied products	2,151.5	7,937.6	100.00	100.00	66.21	83.74	.30	.35
Printing and publishing industries§	316.4	419.6	100.00	100.00	20.48	56.82	.73	1.81
Chemicals and allied products	12,304.3	44,310.8	100.00	100.00	53.47	81.13	.01	.01

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.74	.76	48.41	71.01	3.26	16.05	1.84	.63	----	----	42.46	5.48
1.06	1.14	45.98	81.83	----	----	2.99	1.38	----	----	45.68	6.57
1.46	1.56	49.13	87.70	----	----	3.44	1.38	----	----	43.86	6.04
.65	1.44	19.37	65.37	----	----	4.03	3.39	----	----	74.99	23.68
.43	.45	52.18	64.79	5.54	23.75	.77	.21	----	----	37.40	4.56
.14	.19	39.12	83.97	.14	.60	2.40	1.38	----	----	57.23	11.28
----	----	12.87	42.34	----	----	2.14	2.09	----	----	81.71	33.08
----	----	11.68	52.60	----	----	6.33	8.44	----	----	79.08	22.08
----†	----	38.64	45.94	----	----	.16†	.05†	----	----	37.14	3.38
----	----	5.29	26.27	1.61	10.45	1.73	2.26	----	----	85.62	24.01
----	----	73.38	70.30	7.17	23.49	.02	----	----	----	16.34	1.99
.03	----	2.50	19.05	----	----	8.00	19.18	----	----	89.23	58.44
4.41	4.87	28.51	42.17	10.07	42.90	.16	.04	----	----	56.09	8.98
----	----	77.49	91.87	----	----	1.97	.47	----	----	15.19	1.01
26.40	36.40	17.36	45.40	----	----	.54	.21	----	----	54.25	12.76
.56	3.85	3.55	12.46	----	----	26.79	48.46	----	----	67.79	27.23
13.33	32.52	15.09	42.80	----	----	5.66	4.11	----	----	65.09	15.89
----	----	3.97	25.00	----	----	27.44	52.63	----	----	68.59	22.37
.32	1.37	13.20	38.13	----	----	.89	.82	----	----	77.53	28.52
----	----	34.68	83.17	----	----	6.19	3.14	----	----	56.69	6.28
21.70	22.35	10.20	8.08	8.51	10.41	.29	.19	2.15	2.28	30.41	4.46
11.70	7.80	9.69	8.92	.77	1.05	.19	.08	4.85	5.84	43.76	8.25
1.61	1.03	41.12	32.30	12.04	9.97	----	----	----	----	12.09	1.11
63.05	68.21	.54	.34	17.75	18.89	.73	.57	----	----	12.72	1.97
.27	.15	6.59	3.75	11.97	16.50	.08	.02	.02	.02	34.00	2.63
.06	.03	3.91	2.08	1.57	1.40	.24	.05	1.28	.89	32.13	2.61
----	----	4.59	3.79	.18	.17	----	----	.38	.26	39.52	3.21
----	----	.47	.35	.38	.48	----	----	.23	.22	57.82	6.53
----	----	11.93	17.31	2.29	5.01	.25	.10	1.47	2.31	62.48	8.11
.03†	----†	19.30	14.66	.06†	.09†	----†	----†	.03†	.03†	43.53	4.47
----	----	1.47	1.42	2.27	2.96	----	.01	1.14	1.05	58.69	5.94
----	----	4.38	4.52	10.29	11.00	----	----	.67	.66	48.06	3.71
----	----	7.01	16.31	5.89	18.42	3.16	4.27	10.55	26.80	69.04	20.42
26.57	24.20	2.07	2.63	1.38	2.67	----	----	.47	.64	56.60	20.46
----	----	17.34	16.18	19.52	27.33	5.83	5.11	----	----	35.28	5.24
----	----	.06	----	2.60	4.56	.24	.10	----	----	38.88	2.40
.03	----	3.78	1.50	29.33	34.84	.13	.02	.92	.53	21.96	1.79
47.97	53.50	16.82	12.96	13.74	12.89	----	----	.31	.28	10.15	1.60
20.94	16.74	2.82	3.14	1.98	3.08	----	----	24.32	37.23	36.82	5.76
3.20	2.85	21.87	22.87	.66	.98	.18	.06	13.52	20.04	44.39	6.53
----	----	6.63	11.76	24.58	64.47	----	----	1.63	3.74	65.63	14.80
----	----	1.36	1.26	9.28	20.13	----	----	3.84	5.90	66.96	9.38
10.17	8.54	4.34	2.76	3.37	7.26	.87	.46	.02	.01	44.58	14.30
2.83	1.87	1.87	1.74	30.73	69.89	.29	.13	----	----	55.39	10.98
3.23	1.35	4.31	1.84	2.59	2.06	.86	.21	----	----	27.96	3.26
16.68	12.66	10.03	7.30	1.02	.93	4.19	2.87	----	----	34.43	10.00
1.80	1.51	2.67	1.47	----	----	1.65	.47	----	----	37.08	7.59
11.30	10.78	3.55	2.27	.40	.83	.13	.04	.03	.01	47.99	18.49
1.16	.94	5.86	4.49	8.22	19.69	2.43	.99	.21	.10	51.25	9.76
----	----	----	----	----	----	----	----	----	----	23.46	1.21
----	----	.79	.55	4.49	12.38	.24	.08	----	----	55.63	13.61
----	----	1.88	2.76	2.45	10.01	.59	.76	.22	.15	72.75	20.17
----†	----†	31.03	34.08	.11†	.24†	.01†	.01†	----†	----†	45.65	8.04
.15	----	1.72	2.03	3.31	11.36	.03	.02	----	----	68.38	14.80
----	----	.08	.03	8.76	11.75	.20	.06	----	----	24.46	4.07
----	----	1.04	1.19	6.67	22.16	4.58	2.81	----	----	66.50	15.20
7.52	6.15	2.72	1.28	2.89	4.24	.17	.05	----	----	28.21	7.14

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
EAST SOUTH CENTRAL—continued								
TENNESSEE—continued								
Petroleum and coal products	\$ 199.7	865.1	100.00	100.00	3.41	3.63	----	----
Leather and leather products	232.5	474.4	100.00	100.00	36.90	73.46	8.17	16.06
Stone, clay, and glass products	5,812.3	20,806.7	100.00	100.00	66.72	88.38	.31	.35
Primary metal industries	13,542.9	21,623.5	100.00	100.00	10.18	24.68	.10	.16
Fabricated metal products	2,145.0	3,016.9	100.00	100.00	5.60	16.59	.23	.25
Machinery (except electrical)	482.0	799.2	100.00	100.00	13.32	34.75	3.76	3.82
Electrical machinery	217.7	477.3	100.00	100.00	47.13	81.25	----	----
Transportation equipment	322.2	600.2	100.00	100.00	14.27	31.87	.71	1.27
Miscellaneous manufactures	83.3	133.1	100.00	100.00	26.05	66.94	4.92	11.42
ALABAMA								
Metropolitan Area A	98,539.1	240,606.8	100.00	100.00	8.39	14.47	.24	.56
Metropolitan Area B	64,798.3	167,788.2	100.00	100.00	7.12	12.13	.19	.56
Metropolitan Area C	225.0	877.3	100.00	100.00	.49	.30	----	----
Metropolitan Area D	690.6	1,402.5	100.00	100.00	21.62	38.86	.71	1.27
All other counties	3,320.5	13,861.1	100.00	100.00	1.80	1.40	.02	.02
	29,504.7	56,677.6	100.00	100.00	11.67	24.22	.39	.67
Industry Groups								
Food and kindred products	1,511.4	1,834.7	100.00	100.00	14.32	39.70	.68	1.94
Textile mill products	5,940.8	7,027.8	100.00	100.00	22.80	64.83	.08	.18
Apparel and related products	241.5	374.9	100.00	100.00	28.53	60.79	4.26	10.16
Lumber and products, except furniture	1,687.8	2,268.9	100.00	100.00	9.18	25.29	1.60†	4.81†
Furniture and fixtures	78.9	73.7	100.00	100.00	11.03	39.08	2.03	6.92
Paper and allied products	1,960.3	8,110.0	100.00	100.00	24.22	28.98	----	----
Printing and publishing industries§	130.7	108.2	100.00	100.00	6.35	19.41	.61	2.31
Chemicals and allied products	6,510.7	14,313.2	100.00	100.00	9.66	19.20	.12	.19
Petroleum and coal products	1,391.4	4,951.6	100.00	100.00	49.19	66.51	.16	.10
Stone, clay, and glass products	6,049.6	24,648.6	100.00	100.00	43.37	46.83	.09	.09
Primary metal industries	69,553.0	171,031.9	100.00	100.00	2.05	3.60	.16	.54
Fabricated metal products	642.0	848.3	100.00	100.00	6.73	12.66	1.01	2.10
Machinery (except electrical)	868.2	1,404.1	100.00	100.00	9.71	22.95	.03	.13
Electrical machinery	39.6	74.1	100.00	100.00	.25	----	----	----
Transportation equipment	500.2	789.3	100.00	100.00	4.80	9.30	.12	.32
Miscellaneous manufactures	26.5	20.2	100.00	100.00	12.45	51.98	.75	----
MISSISSIPPI								
Metropolitan Area A	7,747.6	23,153.9	100.00	100.00	5.86	7.99	.80	.98
All other counties	883.5	2,013.2	100.00	100.00	.80	1.30	----	----
	6,864.1	21,140.7	100.00	100.00	6.52	8.63	.90	1.07
Industry Groups								
Food and kindred products	1,138.7	1,632.5	100.00	100.00	7.25	18.62	.53	1.09
Textile mill products	434.8	704.4	100.00	100.00	1.95	4.09	7.36	18.03
Apparel and related products	184.5	209.3	100.00	100.00	4.34	15.00	2.33	8.50
Lumber and products, except furniture	1,430.9	2,326.9	100.00	100.00	14.08	38.85	.01†	----
Furniture and fixtures	104.5	96.3	100.00	100.00	1.91	5.40	----	----
Paper and allied products	2,084.0	12,368.4	100.00	100.00	.28	.17	----	----
Printing and publishing industries§	83.9	66.3	100.00	100.00	----	----	----	----
Chemicals and allied products	891.2	1,712.8	100.00	100.00	2.76	5.51	1.35	2.52
Stone, clay, and glass products	685.9	2,734.9	100.00	100.00	17.17	15.81	1.09	.74
Primary metal industries	28.5	32.8	100.00	100.00	.35	----	----	----
Fabricated metal products	29.1	35.8	100.00	100.00	.69	----	----	----
Machinery (except electrical)	86.8	373.5	100.00	100.00	2.30	4.20	----	----
Transportation equipment	222.1	162.8	100.00	100.00	.45	1.60	----	----
Miscellaneous manufactures	15.3	17.3	100.00	100.00	.65	----	----	----
WEST SOUTH CENTRAL								
ARKANSAS								
Metropolitan Area A	9,301.6	53,461.5	100.00	100.00	3.26	2.29	.95	.76
All other counties	670.4	1,259.2	100.00	100.00	3.73	9.78	1.12	2.02
	8,631.2	52,202.4	100.00	100.00	3.23	2.11	.94	.73
Industry Groups								
Food and kindred products	1,227.8	2,079.1	100.00	100.00	6.03	13.86	.83	1.47
Apparel and related products	39.2	35.9	100.00	100.00	6.38	29.25	----	----
Lumber and products, except furniture	1,144.0	1,838.7	100.00	100.00	9.74	25.79	----	----
Furniture and fixtures	184.9	390.2	100.00	100.00	17.25	29.55	1.14	1.95

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
----	----	7.16	2.44	64.50	90.38	----	----	----	----	24.94	3.55
----	----	1.51	1.18	.43	.82	.17	.06	----	----	52.82	8.41
2.85	1.43	6.41	2.80	1.97	2.86	2.18	1.10	----	----	19.56	3.07
20.26	26.61	.97	.97	.12	.39	.19	.22	----	----	68.17	46.96
33.22	37.81	24.74	28.17	1.06	3.12	5.20	4.73	----	----	29.93	9.32
27.90	33.21	12.26	11.56	2.99	8.15	.81	.36	----	----	38.96	8.16
----	----	2.57	1.95	4.73	8.59	----	----	----	----	45.57	8.21
.06	----	.03	----	21.22	51.18	.31	.15	----	----	63.39	15.53
----	----	2.76	1.88	2.88	8.26	1.63	.98	----	----	61.70	10.52
53.78	53.09	5.09	3.71	3.70	10.59	.79	1.30	4.66	10.50	23.35	5.78
72.09	68.03	2.46	1.89	1.47	3.42	.99	1.51	4.88	10.60	10.81	1.84
1.78	.84	4.49	1.48	65.20	95.70	----	----	----	----	28.04	1.68
.61	.53	6.83	6.59	17.10	45.58	----	----	----	----	53.13	7.18
.71	.29	6.09	3.86	45.76	86.82	----	----	2.35	3.25	43.28	4.37
21.17	23.88	10.71	9.01	3.09	10.98	.46	1.04	4.59	12.38	47.91	17.82
.71	1.08	7.24	9.94	5.68	22.67	4.63	7.89	.52	1.39	66.22	15.40
----	----	.56	.77	.87	3.92	----	----	----	----	75.69	30.30
.62	.67	6.42	7.95	1.90	6.83	.17	.27	.87	1.68	57.23	11.66
-----‡	-----¶	56.93	61.35	.69‡	2.97‡	.09‡	.14‡	-----‡	-----¶	31.50	5.44
----	----	.13	----	2.79	11.40	11.53	25.10	.63	1.36	71.86	16.15
----	----	1.00	.70	31.75	57.90	----	----	5.23	7.92	37.81	4.50
.08	----	.08	----	7.12	42.14	7.50	15.62	.92	3.79	77.35	16.73
29.77	20.41	4.47	3.52	9.35	35.34	2.76	5.02	-----	-----	43.87	16.30
----	----	3.12	1.59	7.68	13.20	.27	.21	11.81	15.94	27.78	2.45
.47	.22	1.26	.56	28.39	48.51	.39	.39	.01	.01	26.02	3.38
72.78	72.52	4.70	3.54	.38	.84	.52	1.06	6.20	13.90	13.21	4.01
14.95	21.05	4.10	5.85	8.38	27.50	11.32	17.68	.06	.16	53.44	12.99
32.83	36.21	4.12	3.62	5.64	19.63	5.08	10.44	.09	.09	42.49	6.88
.25	----	37.12	37.65	22.98	55.87	4.04	3.24	----	----	35.35	3.24
1.88	1.89	22.39	37.46	10.72	37.50	----	----	----	----	60.10	13.53
----	----	1.51	2.97	1.13	7.43	2.64	3.96	3.77	14.85	77.74	18.81
.26	.14	10.28	6.75	32.66	78.32	----	----	----	----	50.13	5.83
.98	.62	2.83	2.59	33.79	88.14	----	----	----	----	61.60	7.36
.17	.09	11.24	7.14	32.52	77.39	----	----	----	----	48.65	5.68
----	----	10.44	16.02	15.12	51.14	----	----	----	----	66.66	13.13
----	----	13.68	22.09	10.21	35.55	----	----	----	----	66.79	20.24
----	----	6.34	9.79	15.39	52.99	----	----	----	----	71.60	13.71
-----‡	-----¶	33.04	35.44	5.08‡	17.99‡	----	----	----	----	47.80	7.73
----	----	.29	----	11.39	70.20	----	----	----	----	86.41	24.40
----	----	.59	.21	70.18	97.16	----	----	----	----	28.95	2.47
----	----	.24	----	17.16	87.63	----	----	----	----	82.60	12.37
----	----	12.17	14.77	23.40	68.44	----	----	----	----	60.32	8.76
----	----	.18	.04	48.84	80.76	----	----	----	----	32.72	2.64
51.23	67.99	----	----	9.47	26.83	----	----	----	----	38.95	5.18
----	----	----	----	22.68	91.34	----	----	----	----	76.63	8.66
6.80	2.65	3.92	1.15	66.13	90.82	----	----	----	----	20.85	1.18
----	----	1.89	4.55	5.72	15.23	----	----	----	----	91.94	78.62
----	----	5.23	10.98	16.34	80.92	----	----	----	----	77.78	8.09
.14	.06	10.92	3.83	40.49	90.46	----	----	----	----	44.24	2.59
.12	.20	6.67	6.45	20.82	71.91	----	----	----	----	67.54	9.65
.14	.06	11.25	3.77	42.01	90.90	----	----	----	----	42.43	2.42
----	----	7.88	9.60	18.01	66.08	----	----	----	----	67.25	8.99
----	----	11.73	22.56	8.42	33.98	----	----	----	----	73.47	14.21
-----‡	-----¶	45.61	55.67	2.32‡	11.04‡	----	----	----	----	42.33	7.50
----	----	2.87	2.69	17.63	58.12	----	----	----	----	61.11	7.69

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
WEST SOUTH CENTRAL—continued								
ARKANSAS—continued								
Paper and allied products	\$ 1,182.0	5,247.4	100.00	100.00	----	----	.02	----
Printing and publishing industries§	96.5	129.7	100.00	100.00	4.56	14.11	.10	----
Chemicals and allied products	2,075.0	17,468.2	100.00	100.00	2.40	1.25	.21	.07
Petroleum and coal products	871.1	8,799.8	100.00	100.00	.02	----	----	----
Leather and leather products	29.9	32.6	100.00	100.00	11.71	40.18	----	----
Stone, clay, and glass products	965.5	6,026.7	100.00	100.00	2.12	1.00	.16	.08
Primary metal industries	1,270.2	11,098.4	100.00	100.00	.20	.16	5.46	3.18
Fabricated metal products	52.4	90.3	100.00	100.00	3.44	8.75	----	----
Machinery (except electrical)	23.5	57.4	100.00	100.00	----	----	.43	----
Transportation equipment	17.6	20.2	100.00	100.00	.57	----	----	----
Miscellaneous manufactures	38.1	46.1	100.00	100.00	2.36	5.64	.79	----
LOUISIANA	24,949.8	146,448.8	100.00	100.00	.68	.55	.05	.03
Metropolitan Area A	800.8	4,516.9	100.00	100.00	.50	.46	----	----
Metropolitan Area B	4,516.7	16,595.5	100.00	100.00	.29	.21	.05	.03
All other counties	19,632.3	125,336.5	100.00	100.00	.78	.60	.05	.03
Industry Groups								
Food and kindred products	4,142.0	17,594.2	100.00	100.00	1.18	.95	.24	.20
Textile mill products	172.6	262.0	100.00	100.00	----	----	----	----
Apparel and related products	136.4	156.2	100.00	100.00	----	----	----	----
Lumber and products, except furniture	1,200.6	2,453.0	100.00	100.00	6.69	19.65	-----†	-----†
Furniture and fixtures	54.3	27.2	100.00	100.00	1.84	9.56	.37	----
Paper and allied products	4,455.8	33,257.4	100.00	100.00	.67	.37	----	----
Printing and publishing industries§	142.9	129.4	100.00	100.00	----	----	----	----
Chemicals and allied products	7,625.0	32,007.1	100.00	100.00	.03	.02	----	.01
Petroleum and coal products	4,938.7	53,777.7	100.00	100.00	----	----	----	----
Stone, clay, and glass products	782.8	5,230.6	100.00	100.00	.18	.10	----	----
Primary metal industries	190.9	232.7	100.00	100.00	----	----	----	----
Fabricated metal products	331.6	385.6	100.00	100.00	.03	----	----	----
Machinery (except electrical)	144.6	197.8	100.00	100.00	.21	----	----	----
Transportation equipment	547.0	533.1	100.00	100.00	1.01	2.94	.33	.47
Miscellaneous manufactures	62.4	176.7	100.00	100.00	.64	1.47	----	----
OKLAHOMA	12,056.6	66,765.2	100.00	100.00	4.44	5.34	1.86	1.13
Metropolitan Area A	2,728.4	13,568.2	100.00	100.00	.12	.10	.01	.02
Metropolitan Area B	1,013.6	3,436.0	100.00	100.00	.16	.15	----	----
All other counties	8,314.6	49,761.0	100.00	100.00	6.39	7.13	2.69	1.51
Industry Groups								
Food and kindred products	2,029.3	4,450.5	100.00	100.00	.50	.88	.31	.23
Apparel and related products	17.6	18.0	100.00	100.00	1.14	----	----	----
Lumber and products, except furniture	97.3	278.6	100.00	100.00	9.04	14.11	-----†	-----†
Furniture and fixtures	33.2	74.6	100.00	100.00	4.52	6.97	.60	----
Paper and allied products	21.4	41.9	100.00	100.00	----	----	----	----
Printing and publishing industries§	198.2	196.5	100.00	100.00	.20	----	----	----
Chemicals and allied products	445.0	3,050.6	100.00	100.00	.09	.09	----	----
Petroleum and coal products	4,232.6	30,597.4	100.00	100.00	.02	.01	----	----
Stone, clay, and glass products	1,699.2	12,437.5	100.00	100.00	20.63	22.48	.01	----
Primary metal industries	2,035.4	13,393.9	100.00	100.00	7.90	5.03	10.68	5.54
Fabricated metal products	264.2	314.7	100.00	100.00	.42	.83	.08	----
Machinery (except electrical)	488.9	824.6	100.00	100.00	.10	.32	----	----
Transportation equipment	58.9	170.4	100.00	100.00	.85	1.53	----	----
Instruments and related products	23.8	11.6	100.00	100.00	----	----	1.26	----
TEXAS	57,753.7	404,111.3	100.00	100.00	.35	.21	.68	.30
Metropolitan Area A	2,313.9	6,933.7	100.00	100.00	1.12	1.44	.13	.11
Metropolitan Area B	3,571.8	10,597.4	100.00	100.00	.03	.02	.08	.05
Metropolitan Area C	3,580.5	13,071.8	100.00	100.00	.22	.22	----	----
Metropolitan Area D	982.6	3,489.2	100.00	100.00	.04	----	.01	----
Metropolitan Area E	233.2	649.8	100.00	100.00	----	----	----	----
Metropolitan Area F	1,672.3	6,748.3	100.00	100.00	.94	1.44	.01	----
Metropolitan Area G	14,253.0	108,861.6	100.00	100.00	----	----	.01	----
Metropolitan Area H	6,494.4	83,460.1	100.00	100.00	----	----	----	----
All other counties	24,652.0	170,299.5	100.00	100.00	.62	.36	1.57	.71

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
----	----	3.14	2.43	36.95	91.92	----	----	----	----	59.90	5.64
----	----	1.45	2.39	16.89	74.56	----	----	----	----	76.99	8.94
----	----	7.15	1.55	49.34	95.25	----	----	----	----	40.90	1.89
----	----	2.77	.51	78.20	98.71	----	----	----	----	19.01	.78
----	----	.33	----	10.03	47.24	----	----	----	----	77.93	12.58
----	----	----	----	65.87	96.98	----	----	----	----	31.85	1.93
.98	.27	13.57	3.20	50.59	91.76	----	----	----	----	29.20	1.43
1.53	2.77	.19	----	21.18	79.07	----	----	----	----	73.66	9.41
----	----	3.40	1.05	32.34	94.77	----	----	----	----	63.83	4.18
----	----	6.25	12.38	21.02	79.21	----	----	----	----	72.16	8.42
----	----	3.94	5.42	18.11	77.01	----	----	----	----	74.80	11.93
2.99	.87	6.31	2.48	46.08	92.05	----	----	----	----	43.88	4.02
.69	.22	.11	.03	47.38	96.94	----	----	----	----	51.32	2.35
.18	.12	4.57	2.89	35.09	91.33	----	----	----	----	59.82	5.42
3.73	.99	6.97	2.52	48.56	91.96	----	----	----	----	39.91	3.90
.17	.07	17.79	9.47	41.28	86.95	----	----	----	----	39.34	2.35
----	----	.17	.23	15.64	79.47	----	----	----	----	84.18	20.31
----	----	.88	1.60	16.42	86.62	----	----	----	----	82.70	11.78
----	----	44.03	48.50	7.86‡	28.00‡	----	----	----	----	41.42	3.84
----	----	----	----	6.81	55.15	----	----	----	----	90.98	35.29
----	----	.01	----	64.58	96.84	----	----	----	----	34.74	2.78
----	----	.56	.93	11.97	84.08	----	----	----	----	87.47	14.99
8.39	3.39	1.73	1.18	31.72	86.19	----	----	----	----	58.13	9.22
----	----	.15	.04	75.80	97.98	----	----	----	----	24.05	1.98
----	----	3.58	1.30	58.70	96.31	----	----	----	----	37.54	2.29
33.79	45.81	----	----	10.21	44.95	----	----	----	----	56.00	9.24
1.21	3.22	1.06	1.30	15.11	80.63	----	----	----	----	82.60	14.86
16.53	18.81	.83	1.26	13.76	69.77	----	----	----	----	68.67	10.16
1.19	3.26	24.57	57.21	1.97	15.04	----	----	----	----	70.93	21.07
----	----	.96	.34	31.25	94.51	----	----	----	----	67.15	3.68
2.00	.91	3.42	1.63	48.91	88.51	----	----	----	----	39.37	2.48
2.87	1.12	8.36	5.05	46.28	90.77	----	----	----	----	42.36	2.95
.86	.43	.56	.34	40.80	95.07	----	----	----	----	57.63	4.00
1.85	.89	2.15	.79	50.76	87.44	----	----	----	----	36.16	2.25
.23	.17	5.12	4.82	28.40	86.30	----	----	----	----	65.45	7.61
----	----	----	----	23.86	92.22	----	----	----	----	75.00	7.78
----	----	19.32	13.78	28.98‡	69.53‡	----	----	----	----	42.65	2.58
----	----	----	----	32.83	89.41	----	----	----	----	62.05	3.62
----	----	----	----	30.37	94.27	----	----	----	----	69.63	5.73
----	----	----	----	16.55	87.33	----	----	----	----	83.25	12.67
----	----	8.18	2.81	41.55	94.85	----	----	----	----	50.18	2.26
----	----	.19	.05	68.75	97.84	----	----	----	----	31.04	2.10
1.77	.42	----	----	54.12	76.08	----	----	----	----	23.48	1.02
7.90	3.46	11.00	5.03	47.40	80.07	----	----	----	----	15.13	.87
2.42	3.15	2.50	3.94	16.43	78.96	----	----	----	----	78.16	13.12
4.75	4.81	.92	1.36	21.68	82.43	----	----	----	----	72.55	11.08
----	----	----	----	36.50	93.25	----	----	----	----	62.65	5.22
----	----	----	----	9.66	62.07	----	----	----	----	89.08	37.93
6.12	1.55	5.03	1.69	49.38	94.20	.06	.04	----	----	38.37	2.00
18.34	8.66	1.27	1.17	41.56	83.68	----	----	----	----	37.59	4.95
3.26	2.13	4.57	3.70	27.55	85.74	----	----	----	----	64.51	8.35
2.40	.99	2.50	1.45	39.14	92.76	----	----	----	----	55.74	4.58
.49	.21	5.65	3.27	36.42	90.84	----	----	----	----	57.39	5.68
----	----	8.70	6.77	33.40	88.24	----	----	----	----	57.89	4.99
1.17	.37	5.78	3.68	43.47	90.43	----	----	----	----	48.62	4.10
10.79	2.42	3.35	1.36	50.24	94.32	.09	.06	----	----	35.52	1.83
.17	.02	.60	.12	79.73	99.05	.31	.12	----	----	19.19	.68
5.41	1.54	7.85	2.46	47.34	93.05	----	----	----	----	37.21	1.88

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
WEST SOUTH CENTRAL—continued								
TEXAS—continued								
Industry Groups								
Food and kindred products	\$ 7,435.9	15,424.3	100.00	100.00	.21	.44	.03	.03
Textile mill products	818.2	1,259.4	100.00	100.00	.64	3.75	----	----
Apparel and related products	420.5	624.8	100.00	100.00	----	----	.02	----
Lumber and products, except furniture	1,247.3	2,658.2	100.00	100.00	7.79	13.40	-----‡	-----‡
Furniture and fixtures	254.6	239.2	100.00	100.00	1.26	4.39	1.10	2.13
Paper and allied products	1,249.5	6,036.6	100.00	100.00	----	----	----	----
Printing and publishing industries§	679.7	1,038.3	100.00	100.00	.15	.25	.09	.24
Chemicals and allied products	11,061.9	61,647.3	100.00	100.00	.05	.07	----	----
Petroleum and coal products	17,508.4	248,533.4	100.00	100.00	----	----	----	----
Leather and leather products	53.7	115.7	100.00	100.00	----	----	.19	----
Stone, clay, and glass products	5,352.7	31,867.7	100.00	100.00	.56	.44	.04	.02
Primary metal industries	7,229.6	27,390.7	100.00	100.00	.56	.57	5.30	4.40
Fabricated metal products	793.5	951.0	100.00	100.00	.08	----	.23	.26
Machinery (except electrical)	1,641.7	3,129.3	100.00	100.00	.07	.08	.01	----
Electrical machinery	199.5	289.9	100.00	100.00	----	----	----	----
Transportation equipment	1,373.6	2,200.5	100.00	100.00	.09	.12	.05	----
Instruments and related products	36.4	56.9	100.00	100.00	----	----	----	----
Miscellaneous manufactures	118.5	135.3	100.00	100.00	3.12	11.60	----	----
MOUNTAIN								
MONTANA	8,301.7	23,039.4	100.00	100.00	13.42	26.22	.05	.04
Industry Groups								
Food and kindred products	1,151.5	4,523.7	100.00	100.00	44.69	68.69	.25	.11
Lumber and products, except furniture‡	333.3	458.2	100.00	100.00	7.29	37.73	-----‡	-----‡
Printing and publishing industries§	50.7	41.6	100.00	100.00	1.58	6.25	----	----
Chemicals and allied products	138.0	463.0	100.00	100.00	6.45	3.39	----	----
Petroleum and coal products	269.5	1,949.4	100.00	100.00	----	----	----	----
Stone, clay, and glass products	663.1	2,300.9	100.00	100.00	46.57	71.17	.03	----
Fabricated metal products	22.5	24.9	100.00	100.00	----	----	----	----
Machinery (except electrical)	25.6	26.7	100.00	100.00	15.62	29.59	2.73	9.36
IDAHO	5,767.5	12,144.6	100.00	100.00	36.52	61.12	.38	.48
Industry Groups								
Food and kindred products	3,017.2	7,284.5	100.00	100.00	47.72	72.08	.64	.73
Lumber and products, except furniture	525.6	875.2	100.00	100.00	10.45	38.01	-----‡	-----‡
Printing and publishing industries§	50.0	25.3	100.00	100.00	9.80	51.78	----	----
Chemicals and allied products	60.0	63.2	100.00	100.00	13.17	49.68	.83	3.96
Stone, clay, and glass products	258.9	733.8	100.00	100.00	75.98	95.33	.54	.34
Machinery (except electrical)	28.0	41.7	100.00	100.00	18.93	31.41	.71	----
WYOMING	2,008.8	10,334.2	100.00	100.00	18.07	22.56	.32	.25
Industry Groups								
Food and kindred products	424.3	2,067.3	100.00	100.00	21.80	36.50	1.51	1.23
Lumber and products, except furniture	71.3	251.4	100.00	100.00	56.52	87.55	-----‡	-----‡
Printing and publishing industries§	19.7	12.6	100.00	100.00	----	----	----	----
Chemicals and allied products	20.9	28.4	100.00	100.00	----	----	----	----
Petroleum and coal products	1,086.7	6,368.5	100.00	100.00	----	----	----	----
Stone, clay, and glass products	361.9	1,561.3	100.00	100.00	63.25	86.59	----	----
COLORADO	20,967.9	66,653.0	100.00	100.00	16.50	27.88	.39	.48
Metropolitan Area A**	4,218.5	10,961.5	100.00	100.00	18.91	38.32	.50	.65
All other counties	16,749.4	55,691.7	100.00	100.00	15.90	25.82	.36	.45
Industry Groups								
Food and kindred products	4,328.1	17,971.9	100.00	100.00	57.37	74.90	1.19	1.26
Apparel and related products	34.8	44.8	100.00	100.00	11.78	29.24	1.15	----
Lumber and products, except furniture	171.1	332.3	100.00	100.00	37.76	79.63	.35‡	.75‡
Furniture and fixtures	29.1	48.3	100.00	100.00	9.97	21.74	----	----
Paper and allied products	141.8	311.2	100.00	100.00	1.27	3.37	----	----
Printing and publishing industries§	185.3	152.5	100.00	100.00	3.62	17.18	1.19	4.98
Chemicals and allied products	660.9	1,089.1	100.00	100.00	16.64	44.98	.95	1.86
Petroleum and coal products	134.1	169.1	100.00	100.00	1.94	4.67	----	----

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.45	.37	4.67	4.82	23.09	84.07	----	----	----	----	71.55	10.26
----	----	5.68	8.96	15.34	68.90	----	----	----	----	78.34	18.40
----	----	1.55	2.08	22.33	89.34	----	----	----	----	76.10	8.58
----‡	----¶	31.96	33.63	11.19‡	45.79‡	----	----	----	----	49.05	7.17
----	----	1.41	2.84	12.77	75.38	----	----	----	----	83.46	15.26
----	----	.58	.25	49.50	97.28	----	----	----	----	49.92	2.48
----	----	.19	.30	19.51	90.14	----	----	----	----	80.06	9.07
2.57	1.00	11.77	4.47	52.25	91.83	----	----	----	----	33.36	2.63
----	----	.39	.08	82.04	99.28	.12	.04	----	----	17.46	.60
----	----	1.30	1.04	24.39	93.34	----	----	----	----	74.12	5.62
.02	.01	2.21	.92	61.55	96.19	----	----	----	----	35.61	2.43
42.79	19.77	6.71	5.47	21.16	66.92	.17	.23	----	----	23.30	2.63
1.63	1.83	1.68	2.61	13.35	77.47	----	----	----	----	83.05	17.83
6.04	4.44	.85	1.05	17.59	82.34	----	----	----	----	75.45	12.08
3.71	3.42	----	----	17.29	79.75	----	----	----	----	79.00	16.83
.07	.11	6.62	10.90	12.68	69.03	----	----	----	----	80.49	19.83
----	----	1.10	1.05	22.80	88.22	----	----	----	----	76.10	10.72
----	----	2.95	5.47	16.03	71.32	----	----	----	----	77.89	11.60
11.76	8.62	3.57	2.69	17.23	47.56	----	----	----	----	53.98	14.86
4.81	1.37	3.98	2.18	16.52	25.62	----	----	----	----	29.75	2.03
----‡	----¶	47.70	50.61	1.11‡	3.32‡	----	----	----	----	43.89	8.34
----	----	1.97	2.88	14.40	76.20	----	----	----	----	82.05	14.66
----	----	.22	.13	35.87	84.84	----	----	----	----	57.46	11.64
----	----	----	----	79.30	99.12	----	----	----	----	20.70	.88
.08	.11	11.34	10.32	8.93	14.26	----	----	----	----	33.06	4.14
12.44	20.08	2.22	4.82	21.78	64.26	----	----	----	----	63.56	10.84
23.05	27.72	2.34	2.25	8.98	22.10	----	----	----	----	47.27	8.99
9.72	8.13	23.48	21.55	----	----	.01	----	----	----	29.90	8.72
5.06	2.42	27.42	22.32	----	----	.02	----	----	----	19.15	2.45
----‡	----¶	41.21	43.85	----	----	----‡	----¶	----	----	48.34	18.13
----	----	3.60	14.62	----	----	----	----	----	----	86.60	33.60
----	----	18.83	17.72	----	----	----	----	----	----	67.17	28.64
----	----	2.32	.84	----	----	----	----	----	----	21.17	3.49
10.36	53.48	3.93	4.56	----	----	----	----	----	----	66.07	10.55
.26	.05	8.86	4.11	39.32	71.03	----	----	----	----	33.17	2.00
1.18	.24	30.03	14.75	29.86	46.75	----	----	----	----	15.63	.53
----‡	----¶	11.92	5.41	2.52‡	4.85‡	----	----	----	----	29.03	2.19
----	----	----	----	14.21	84.13	----	----	----	----	85.79	15.87
----	----	52.15	78.52	4.78	11.97	----	----	----	----	43.06	9.51
----	----	2.83	1.30	57.82	96.70	----	----	----	----	39.36	1.99
----	----	.03	----	5.69	9.74	----	----	----	----	31.03	3.67
45.71	31.45	8.55	6.42	7.58	17.40	.02	.01	6.96	15.07	14.28	1.30
6.73	3.53	6.45	7.06	17.98	44.96	----	----	----	----	49.42	5.48
55.53	36.95	9.08	6.30	4.96	11.97	.03	.01	8.71	18.03	5.43	.47
5.58	1.96	3.11	1.80	12.00	18.98	.07	.01	----	----	20.68	1.09
.86	----	----	----	20.40	66.29	----	----	----	----	65.80	4.46
----‡	----¶	20.28	15.68	.23‡	.45‡	----‡	----‡	----	----	41.38	3.49
4.81	10.35	6.87	14.08	13.75	50.31	----	----	----	----	64.60	3.52
----	----	48.31	86.05	2.40	3.12	----	----	----	----	48.03	7.46
----	----	2.05	4.46	13.33	59.67	.49	.72	----	----	79.33	12.98
----	----	5.60	11.05	6.87	23.50	----	----	----	----	69.93	18.61
----	----	.75	1.12	8.87	50.03	----	----	----	----	88.44	44.18

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
MOUNTAIN—continued								
COLORADO—continued								
Leather and leather products	\$ 28.2	38.3	100.00	100.00	6.74	20.63	2.13	6.53
Stone, clay, and glass products	1,389.0	7,755.2	100.00	100.00	31.56	31.42	1.17	.69
Primary metal industries	12,659.4	35,437.8	100.00	100.00	1.23	2.40	.01	.01
Fabricated metal products	175.1	192.6	100.00	100.00	4.51	12.25	.34	1.30
Machinery (except electrical)	500.1	1,244.5	100.00	100.00	29.93	65.26	.08	----
Electrical machinery	18.8	18.5	100.00	100.00	.53	-----	1.06	-----
Transportation equipment	48.3	76.0	100.00	100.00	24.02	55.13	1.66	3.29
Miscellaneous manufactures	57.5	112.8	100.00	100.00	12.70	41.84	.87	-----
NEW MEXICO	1,283.1	5,413.3	100.00	100.00	2.64	3.34	.20	.19
Industry Groups								
Food and kindred products	313.8	540.7	100.00	100.00	3.51	9.69	.80	1.89
Lumber and products, except furniture	102.1	167.7	100.00	100.00	12.73	56.23	-----	-----
Printing and publishing industries§	37.4	36.2	100.00	100.00	-----	-----	-----	-----
Chemicals and allied products	307.2	2,250.1	100.00	100.00	-----	-----	-----	-----
Petroleum and coal products	169.0	555.6	100.00	100.00	-----	-----	-----	-----
Stone, clay, and glass products	37.9	95.9	100.00	100.00	23.75	32.74	.26	-----
ARIZONA	5,367.4	13,467.2	100.00	100.00	1.66	1.87	1.28	1.30
Metropolitan Area A	1,309.9	1,793.6	100.00	100.00	6.60	13.73	-----	-----
All other counties	4,057.5	11,673.5	100.00	100.00	.07	.04	1.70	1.50
Industry Groups								
Food and kindred products	798.2	967.9	100.00	100.00	.03	-----	-----	-----
Lumber and products, except furniture	271.8	336.2	100.00	100.00	.22	1.55	-----	-----
Printing and publishing industries§	55.7	23.4	100.00	100.00	.36	-----	-----	-----
Chemicals and allied products	192.0	395.2	100.00	100.00	-----	-----	-----	-----
Stone, clay, and glass products	334.2	898.6	100.00	100.00	1.26	1.75	20.59	19.51
Primary metal industries	3,617.8	10,750.3	100.00	100.00	2.32	2.15	-----	-----
Fabricated metal products	29.0	29.9	100.00	100.00	.34	-----	-----	-----
Transportation equipment	21.4	19.4	100.00	100.00	-----	-----	-----	-----
UTAH	18,880.8	55,873.5	100.00	100.00	10.30	17.14	.09	.13
Metropolitan Area A	2,741.9	11,465.2	100.00	100.00	15.29	16.57	.09	.09
All other counties	16,138.9	44,408.5	100.00	100.00	9.45	17.29	.09	.14
Industry Groups								
Food and kindred products	1,804.3	5,286.5	100.00	100.00	47.16	70.38	.86	1.15
Textile mill products	23.4	66.4	100.00	100.00	15.81	15.81	-----	-----
Apparel and related products	19.3	22.5	100.00	100.00	10.88	23.11	-----	-----
Lumber and products, except furniture	38.4	53.8	100.00	100.00	6.77	14.68	-----	-----
Printing and publishing industries§	90.4	58.5	100.00	100.00	2.88	13.50	1.55	8.72
Chemicals and allied products	243.1	529.7	100.00	100.00	29.37	62.81	-----	-----
Petroleum and coal products	850.8	3,847.8	100.00	100.00	8.90	9.60	-----	-----
Stone, clay, and glass products	969.1	4,248.9	100.00	100.00	41.18	55.50	.04	.06
Primary metal industries	14,678.1	41,498.5	100.00	100.00	3.56	6.54	-----	-----
Fabricated metal products	72.8	116.7	100.00	100.00	9.75	22.45	-----	-----
Machinery (except electrical)	50.0	77.7	100.00	100.00	5.40	16.86	-----	-----
NEVADA	2,458.6	3,935.0	100.00	100.00	13.50	28.50	.02	.06
Industry Groups								
Food and kindred products	150.9	113.9	100.00	100.00	.80	2.28	-----	-----
Lumber and products, except furniture	48.8	14.7	100.00	100.00	-----	-----	-----	-----
Printing and publishing industries§	21.7	4.3	100.00	100.00	1.38	-----	-----	-----
Chemicals and allied products	1,287.7	1,432.9	100.00	100.00	-----	-----	-----	-----
Stone, clay, and glass products	597.8	1,217.4	100.00	100.00	-----	-----	.08	.21
PACIFIC								
WASHINGTON	33,684.2	63,931.7	100.00	100.00	11.18	18.66	.14	.17
Metropolitan Area A	5,796.0	9,546.8	100.00	100.00	9.79	18.66	.19	.32
Metropolitan Area B	4,497.5	9,421.2	100.00	100.00	1.43	2.34	.19	.16
Metropolitan Area C	4,368.5	7,563.4	100.00	100.00	-----	-----	-----	-----
Metropolitan Area D	6,030.0	10,004.8	100.00	100.00	10.13	22.21	.14	.20
All other counties	12,992.2	27,395.4	100.00	100.00	19.42	28.14	.14	.17

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
-----	-----	-----	-----	14.54	60.31	-----	-----	-----	-----	76.60	12.53
4.22	1.15	5.59	2.23	41.41	63.94	-----	-----	-----	-----	16.05	.57
72.84	57.62	10.83	9.05	1.01	2.19	-----	-----	11.52	28.34	2.55	.38
5.37	7.74	3.94	7.42	16.96	59.61	-----	-----	-----	-----	68.87	11.68
10.36	6.57	4.38	2.94	10.50	21.61	-----	-----	-----	-----	44.75	3.62
-----	-----	2.66	3.24	21.28	85.95	-----	-----	-----	-----	74.47	10.81
-----	-----	3.11	2.50	14.08	32.76	-----	-----	-----	-----	57.14	6.32
-----	-----	2.96	4.96	24.35	48.94	.70	.35	-----	-----	58.43	3.90
.23	.05	9.68	5.34	51.61	89.46	-----	-----	-----	-----	35.64	1.63
-----	-----	3.22	3.44	26.13	77.66	-----	-----	-----	-----	66.35	7.32
-----‡	-----¶	31.64	37.69	-----‡	-----¶	-----	-----	-----	-----	55.63	6.08
-----	-----	2.14	3.31	22.99	88.12	-----	-----	-----	-----	74.87	8.56
-----	-----	22.69	8.04	57.65	91.20	-----	-----	-----	-----	19.66	.76
-----	-----	-----	-----	62.60	97.61	-----	-----	-----	-----	37.40	2.39
-----	-----	2.90	1.25	29.82	63.50	-----	-----	-----	-----	43.27	2.50
1.44	1.03	23.86	20.30	34.79	69.26	.07	.01	-----	-----	36.89	6.23
4.98	6.77	2.66	3.14	19.54	60.45	.06	.02	-----	-----	66.17	15.88
.30	.15	30.71	22.94	39.71	70.61	.07	.01	-----	-----	27.44	4.74
-----	-----	8.97	16.85	19.01	63.53	.13	.05	-----	-----	71.87	19.57
-----‡	-----¶	82.60	96.64	-----‡	-----¶	-----‡	-----¶	-----	-----	17.18	1.81
-----	-----	2.15	5.13	5.21	45.30	4.13	4.27	-----	-----	88.15	45.30
-----	-----	7.81	5.97	42.71	86.06	.05	.03	-----	-----	49.43	7.95
3.35	1.66	12.63	10.00	42.28	65.81	.09	.01	-----	-----	19.81	1.26
1.58	1.04	25.42	19.75	40.69	71.70	-----	-----	-----	-----	29.99	5.37
3.79	8.36	-----	-----	19.31	75.59	-----	-----	-----	-----	76.55	16.05
36.92	51.03	-----	-----	13.08	35.05	-----	-----	-----	-----	50.00	13.92
61.65	45.25	2.64	2.44	5.54	17.52	10.72	16.60	-----	-----	9.05	.92
19.29	10.17	6.28	4.44	28.47	66.59	-----	-----	-----	-----	30.57	2.15
68.85	54.30	2.02	1.93	1.65	4.86	12.54	20.88	-----	-----	5.39	.60
4.82	2.16	5.79	4.57	8.22	18.58	.18	.26	-----	-----	32.97	2.90
-----	-----	-----	-----	35.47	81.17	-----	-----	-----	-----	48.72	3.01
-----	-----	8.81	13.78	12.44	55.56	-----	-----	-----	-----	67.88	7.56
-----‡	-----¶	40.89	43.87	8.07‡	37.73‡	-----‡	-----¶	-----	-----	44.27	3.72
-----	-----	.11	-----	6.42	51.45	.66	3.08	-----	-----	88.38	23.25
.49	1.87	13.90	12.65	3.00	9.74	2.43	4.81	-----	-----	50.80	8.12
-----	-----	1.60	1.02	5.22	10.37	71.20	77.89	-----	-----	13.08	1.13
6.00	2.98	3.08	1.08	19.36	37.90	-----	-----	-----	-----	30.35	2.49
78.26	60.29	1.96	2.21	4.20	15.62	9.60	15.03	-----	-----	2.43	.31
6.18	6.34	3.57	4.28	14.15	59.04	-----	-----	-----	-----	66.35	7.88
4.80	3.22	6.60	7.98	15.20	63.58	-----	-----	-----	-----	68.00	8.37
5.32	4.79	31.76	46.61	-----	-----	.45	.17	-----	-----	48.95	19.88
-----	-----	28.89	75.15	-----	-----	2.72	1.93	-----	-----	67.59	20.63
-----‡	-----¶	13.93	42.18	-----	-----	-----‡	-----¶	-----	-----	86.07	57.82
-----	-----	2.76	13.95	-----	-----	6.45	13.95	-----	-----	89.40	72.09
-----	-----	23.06	48.89	-----	-----	.34	.22	-----	-----	76.59	50.89
21.86	15.48	69.07	82.81	-----	-----	.20	.05	-----	-----	8.78	1.45
1.20	.90	31.18	50.90	-----	-----	1.02	.43	-----	-----	55.28	28.94
1.54	1.14	36.91	64.77	-----	-----	3.91	1.85	-----	-----	47.66	13.26
4.70	3.45	47.06	75.69	-----	-----	.48	.19	-----	-----	46.15	18.18
-----	-----	12.84	23.76	-----	-----	.11	.06	-----	-----	87.05	76.18
.42	.27	10.59	12.28	-----	-----	.48	.21	-----	-----	78.23	64.82
.59	.41	38.86	59.15	-----	-----	.48	.19	-----	-----	40.51	11.95

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
PACIFIC—continued								
WASHINGTON—continued								
Industry Groups								
Food and kindred products	\$ 3,855.5	5,769.9	100.00	100.00	11.98	25.16	.89	1.45
Textile mill products	64.5	130.8	100.00	100.00	2.33	1.99	----	----
Apparel and related products	67.4	52.6	100.00	100.00	1.04	4.94	----	----
Lumber and products, except furniture	2,566.6	2,613.8	100.00	100.00	2.26	7.92	-----‡	-----‡
Furniture and fixtures	154.3	109.1	100.00	100.00	1.81	4.77	.91	2.29
Paper and allied products	7,250.9	17,238.8	100.00	100.00	.79	1.14	-----	-----
Printing and publishing industries§	255.7	146.2	100.00	100.00	3.64	19.70	-----	-----
Chemicals and allied products	1,465.3	2,819.0	100.00	100.00	3.66	6.04	-----	-----
Stone, clay, and glass products	4,084.8	10,359.2	100.00	100.00	68.11	82.53	.15	.15
Primary metal industries	11,495.4	22,051.2	100.00	100.00	2.52	5.37	-----	-----
Fabricated metal products	398.0	357.3	100.00	100.00	.63	1.46	.35	.70
Machinery (except electrical)	760.4	540.7	100.00	100.00	2.66	11.63	.29	.94
Electrical machinery	62.4	50.9	100.00	100.00	.16	-----	-----	-----
Transportation equipment	1,083.1	1,578.6	100.00	100.00	1.39	1.99	.07	.16
Miscellaneous manufactures	64.0	41.0	100.00	100.00	2.34	6.34	.31	-----
OREGON	15,760.0	23,665.3	100.00	100.00	5.89	11.60	.19	.31
Metropolitan Area A	8,729.9	14,121.4	100.00	100.00	1.34	2.65	.11	.09
All other counties	7,030.1	9,543.8	100.00	100.00	11.55	24.84	.30	.64
Industry Groups								
Food and kindred products	2,763.5	4,326.0	100.00	100.00	17.58	29.68	.12	.29
Textile mill products	285.9	588.5	100.00	100.00	16.75	30.28	-----	-----
Apparel and related products	50.4	50.0	100.00	100.00	-----	-----	-----	-----
Lumber and products, except furniture	3,780.1	3,205.8	100.00	100.00	1.60	6.46	.09‡	.40‡
Furniture and fixtures	147.8	164.2	100.00	100.00	.54	1.58	.41	1.52
Paper and allied products	1,956.6	4,159.1	100.00	100.00	.02	-----	-----	-----
Printing and publishing industries§	160.4	68.9	100.00	100.00	.81	3.77	.12	-----
Chemicals and allied products	452.7	692.8	100.00	100.00	.73	1.14	.02	-----
Petroleum and coal products	113.7	215.1	100.00	100.00	-----	-----	-----	-----
Rubber products	28.3	35.7	100.00	100.00	-----	-----	-----	-----
Stone, clay, and glass products	1,435.0	3,243.7	100.00	100.00	19.99	29.24	.96	1.02
Primary metal industries	3,618.1	5,996.4	100.00	100.00	.88	1.49	.20	.13
Fabricated metal products	327.9	284.7	100.00	100.00	1.40	3.69	.27	.88
Machinery (except electrical)	305.6	358.2	100.00	100.00	.20	-----	-----	-----
Electrical machinery	100.0	97.4	100.00	100.00	1.30	2.67	-----	-----
Transportation equipment	164.8	127.1	100.00	100.00	.49	2.05	-----	-----
Miscellaneous manufactures	52.8	38.0	100.00	100.00	4.55	20.79	-----	-----
CALIFORNIA	112,954.3	277,096.7	100.00	100.00	.10	.13	.03	.05
Metropolitan Area A	29,477.2	80,468.2	100.00	100.00	.07	.09	.01	.01
Metropolitan Area B	4,403.1	10,431.0	100.00	100.00	.55	.70	-----	-----
Metropolitan Area C	1,128.4	2,120.3	100.00	100.00	.43	.37	.10	.12
Metropolitan Area D	1,936.9	5,368.8	100.00	100.00	.64	.63	.02	-----
Metropolitan Area E	1,275.3	1,970.5	100.00	100.00	.01	-----	-----	-----
Metropolitan Area F	40,414.4	95,396.0	100.00	100.00	.04	.07	.07	.12
Metropolitan Area G	1,475.3	1,833.5	100.00	100.00	.02	-----	-----	-----
Metropolitan Area H	15,880.9	37,027.3	100.00	100.00	-----	-----	-----	-----
All other counties	16,962.8	42,463.4	100.00	100.00	.22	.27	.03	.01
Industry Groups								
Food and kindred products	20,078.2	43,111.0	100.00	100.00	.10	.14	.02	.02
Textile mill products	689.1	1,493.1	100.00	100.00	.22	.35	-----	-----
Apparel and related products	684.0	479.1	100.00	100.00	.26	1.65	-----	-----
Lumber and products, except furniture	2,917.3	2,681.8	100.00	100.00	.49	1.95	-----‡	-----‡
Furniture and fixtures	636.9	413.1	100.00	100.00	.16	.63	-----	-----
Paper and allied products	2,762.4	7,467.2	100.00	100.00	-----	-----	-----	-----
Printing and publishing industries§	1,699.0	1,248.5	100.00	100.00	.01	-----	-----	-----
Chemicals and allied products	11,604.9	28,367.3	100.00	100.00	.01	.02	-----	-----
Petroleum and coal products	15,322.3	74,441.0	100.00	100.00	-----	-----	-----	-----
Rubber products	2,589.1	5,205.6	100.00	100.00	-----	-----	-----	-----
Leather and leather products	220.3	295.8	100.00	100.00	1.54	2.67	-----	-----
Stone, clay, and glass products	20,427.4	57,954.7	100.00	100.00	.26	.28	.02	.01
Primary metal industries	18,948.5	38,565.9	100.00	100.00	.03	.02	.05	.09

For footnotes, see end of table.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
.75	1.07	39.15	59.78	----	----	3.55	1.79	----	----	43.68	10.75
----	----	55.97	91.51	----	----	.93	.23	----	----	40.78	6.27
----	----	24.33	71.86	----	----	6.53	6.27	----	----	68.10	16.92
----‡	----¶	23.19	57.88	----	----	.07‡	.05‡	----	----	74.47	34.15
----	----	16.72	50.05	----	----	.97	1.01	----	----	79.59	41.89
----	----	57.08	84.78	----	----	.03	.01	----	----	42.10	14.07
----	----	9.86	38.99	----	----	9.62	11.70	----	----	76.89	29.62
.23	.18	39.16	67.83	----	----	.20	.07	----	----	56.76	25.88
1.77	.81	12.63	12.50	----	----	.15	.04	----	----	17.21	3.97
2.18	1.70	21.49	35.79	----	----	.13	.05	----	----	73.68	57.10
2.96	4.17	24.00	60.40	----	----	13.74	15.90	----	----	58.32	17.38
4.54	5.51	10.97	32.22	----	----	3.34	3.81	----	----	78.21	45.88
----	----	19.07	57.17	----	----	10.26	11.39	----	----	70.51	31.43
----	----	35.23	71.36	----	----	5.06	2.50	----	----	58.24	24.00
2.19	6.10	15.47	52.93	----	----	10.16	10.49	----	----	69.53	24.15
2.76	2.90	29.73	51.82	----	----	2.64	1.68	----	----	58.79	31.68
4.17	4.25	26.57	48.12	----	----	4.15	2.50	----	----	63.67	42.38
1.01	.91	33.65	57.28	----	----	.75	.47	----	----	52.73	15.86
2.21	1.60	33.31	55.75	----	----	6.95	4.11	----	----	39.83	8.57
----	----	41.83	61.00	----	----	.80	.31	----	----	40.61	8.41
----	----	35.12	84.40	----	----	4.56	4.00	----	----	60.32	11.60
----‡	----¶	28.35	65.97	----	----	.02‡	.02‡	----	----	69.93	27.15
----	----	24.09	71.01	----	----	1.01	.73	----	----	73.95	25.15
.01	----	50.96	79.59	----	----	.18	.07	----	----	48.83	20.34
----	----	5.42	27.00	----	----	13.65	26.12	----	----	79.99	43.11
----	----	30.26	56.38	----	----	5.52	3.22	----	----	63.46	39.26
----	----	61.74	90.24	----	----	7.56	3.58	----	----	30.69	6.18
----	----	41.34	88.52	----	----	----	----	----	----	58.66	11.48
----	----	56.61	65.88	----	----	.20	.07	----	----	22.24	3.79
9.76	9.68	6.48	10.74	----	----	.71	.41	----	----	81.97	77.56
1.83	5.23	21.68	47.70	----	----	16.77	20.44	----	----	58.04	22.06
4.84	6.23	46.63	76.69	----	----	7.30	6.62	----	----	41.03	10.47
----	----	16.10	43.33	----	----	30.20	38.19	----	----	52.40	15.81
----	----	5.64	13.14	----	----	7.71	8.58	----	----	86.16	76.24
----	----	13.26	43.95	----	----	13.83	15.53	----	----	68.37	19.74
7.58	4.57	18.61	24.17	32.05	61.25	1.08	.67	1.89	3.06	38.65	6.10
4.77	2.31	9.95	12.61	43.14	77.53	1.69	1.18	.37	.36	40.01	5.92
1.96	1.28	9.01	9.33	47.98	80.06	.76	.28	.57	.84	39.17	7.51
7.32	5.85	15.08	24.42	27.54	53.02	2.78	.81	5.47	9.42	41.28	6.00
2.10	1.33	4.15	3.98	58.52	86.31	1.08	.69	3.03	4.04	30.47	3.01
4.31	3.40	18.10	29.36	21.12	53.88	1.75	1.99	.65	.99	54.06	10.37
3.08	1.61	12.93	18.44	34.21	69.59	.50	.15	1.24	2.12	47.93	7.89
.09	.14	24.15	56.03	8.91	21.81	9.42	4.89	1.19	4.00	56.22	13.14
33.48	22.61	43.09	58.39	.91	1.51	.02	.01	8.05	14.43	14.44	3.06
1.97	1.14	28.21	33.69	32.76	58.41	1.59	1.32	.44	.52	34.79	4.63
1.73	1.23	12.99	17.68	38.57	69.47	4.02	3.60	1.20	1.68	41.37	6.17
----	----	20.40	32.72	34.57	59.65	.07	.02	.52	.56	44.22	6.70
.25	.52	1.37	4.01	12.88	66.75	.88	.33	2.47	7.43	81.89	18.81
----‡	----¶	35.33	73.54	1.59‡	7.17‡	.05‡	.03‡	.03‡	.06‡	62.49	17.25
----	----	4.11	15.76	10.72	53.57	.46	.46	.64	2.25	83.91	27.33
----	----	15.31	20.91	46.78	68.75	1.01	.27	3.80	4.83	33.10	5.23
----	----	1.74	6.21	13.64	64.61	.57	.62	.74	2.25	83.31	26.32
1.77	.80	37.48	50.28	21.77	36.43	.46	.25	1.94	4.66	36.56	7.56
----	----	5.35	4.80	61.12	89.50	.04	.01	2.11	2.06	31.38	3.63
----	----	17.05	33.58	25.75	52.53	.19	.05	.39	.56	56.61	13.29
----	----	16.52	41.72	17.93	45.13	.14	.07	.18	.37	63.69	10.04
.95	.38	38.31	43.90	36.92	51.33	.13	.03	.28	.27	23.13	3.80
38.97	28.82	13.21	21.08	18.48	34.95	.34	.12	5.17	10.02	23.75	4.89

**Table 5 - Total Fuel Costs and Inherent Thermal Values
by Manufacturing Industries, for States by**

METROPOLITAN AREAS and INDUSTRY GROUPS	TOTAL		Per Cent of					
			All Fuels		Bituminous Coal		Anthracite Coal	
	Fuel Costs (thousands of dollars)	Btu. (billions)	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
PACIFIC—continued								
CALIFORNIA—continued								
Fabricated metal products	\$ 3,891.6	4,723.2	100.00	100.00	.24	.66	.01	----
Machinery (except electrical)	3,127.1	2,926.3	100.00	100.00	.10	.27	.04	.09
Electrical machinery	1,166.9	1,163.7	100.00	100.00	----	----	.17	.21
Transportation equipment	5,390.6	5,841.5	100.00	100.00	.05	.18	.01	----
Instruments and related products	251.8	250.6	100.00	100.00	.16	1.04	6.87	29.41
Miscellaneous manufactures	523.1	441.5	100.00	100.00	.13	.59	----	----

Note: Due to rounding, some figures do not add to major totals; further, the Bureau of the Census is prohibited by law from publishing any statistics that reveal the operations of individual companies. For this reason the statistics for some industry groups and counties are not shown. They are included, however, in the appropriate State totals.

----Zero or not applicable.

*The cost figures for the "Other fuels" classification contained in the source data were eliminated in making the computations of the proportion of total fuel costs accounted for by each type of fuel since no amount figures for this "Other fuels" classification were available which would have permitted a corresponding computation of the proportion of total energy supplied by each type of fuel. This "Other fuels" classification accounted for 2.9 per cent of the total cost of fuel and electric energy consumed by manufacturing industries in the United States in 1947.

†Represents mixtures of natural and manufactured gas. Includes all gas reported by establishments that purchase more than one type of gas. Also includes some gas for which the type was not reported.

of Fuels Consumed and Electric Energy Purchased Metropolitan Areas and Industry Groups, 1947 *

Total Fuel Costs and Per Cent of Total Btu.

Coke		Fuel Oil		Natural Gas		Manufactured Gas		Mixed Gas†		Electric Energy	
Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.	Fuel Costs	Btu.
7.85	8.77	3.80	7.38	24.72	67.83	.59	.27	.83	1.66	61.96	13.43
3.07	3.48	7.40	15.21	16.61	56.85	.81	.62	1.24	3.40	70.74	20.09
.63	.64	4.75	11.03	18.58	61.30	1.12	.69	1.77	4.14	72.98	21.99
.42	.68	5.91	15.53	18.97	54.82	2.55	1.52	.60	1.78	71.49	25.50
----	----	1.19	2.00	13.38	39.11	3.49	1.80	4.45	9.90	70.45	16.76
----	----	2.92	8.29	17.43	59.89	.52	.39	3.52	9.90	75.47	20.95

‡Figures for cost of anthracite, coke, and gas for industry groups 242 and 244, and for industry 2432, are included under "Other fuels." Quantity figures for these items are not available.

§In the basic data figures shown for coal, coke, fuel oil, and gas represent only establishments for which long-form reports were obtained. A single figure for "All fuels" was collected on short forms used in the "Printing and publishing industries." This total is included under "Other fuels."

||Indicates percentages which were less than .005 per cent or which were based on amount or cost figures of less than 50.

¶Not available.

**Figures for Genesee County, Michigan; Blount County, Tennessee; Fayette County, West Virginia; and Jefferson County, Colorado, were not published in order to avoid approximate disclosure of data for individual companies. The figures for Fairfax County, Virginia, were not published since they were extremely small.

Appendices

APPENDIX A

GENERAL EXPLANATIONS OF THE BASIC DATA

The 1947 Census of Manufactures is the first to be taken since 1939. The first Census of Manufactures covered the year 1899 and a census was taken at 10-year intervals in connection with the Decennial Census of Population up to and including 1899, with the exception of 1829. It was conducted at 5-year intervals from 1904 through 1919, and every other year from 1921 through 1939, but was suspended during the war period. Present legislation provides for a Census of Manufactures to cover the year 1953 and every fifth year thereafter.

1. *The Census Report Forms*

More than 200 different report forms were used to canvass the establishments included in the 1947 census. With a few exceptions, the general information requested was the same for all forms, but in addition each form contained inquiries adapted to the requirements for information on production of commodities, materials consumption, and equipment in use from one or several of the more than 450 manufacturing industries recognized by the Standard Industrial Classification. The product and materials section of each form was the result of intensive study of the 1939 census reports and extensive consultation with other Federal agencies, manufacturers, and trade associations in an effort to provide the most useful information consistent with the ability of manufacturers to report the desired data. In addition to these standard forms, shorter forms requesting limited general and product information were designed for the use of smaller establishments in about one-third of the manufacturing industries.

2. *The Canvass*

In the 1947 census the report forms were distributed and for the most part returned by mail; however, manufacturers who did not send in a report or whose reports were incomplete or otherwise inadequate were reached by telephone or personal visit from the Field Offices of the Bureau. An important exception to this procedure was

made in the case of the highly mobile eastern lumber mills, which were reached entirely by field enumeration. Manufacturers are required by law to report in the Census of Manufactures and an intensive field enumeration of selected areas indicates that this census covers virtually all significant manufacturing establishments.

3. *Establishments Covered in the Census*

The 1947 Census of Manufactures covered, for the 48 States and the District of Columbia, all establishments primarily engaged in manufacturing, as defined in the 1945 revision of the Standard Industrial Classification sponsored by the Bureau of the Budget. This system of classification is now in general use not only among Government agencies but also outside the Government. In a few instances, however, the Standard Industrial Classification was not followed; such departures are noted in the reports for the industries affected.

To the extent possible, the Census of Manufactures is conducted on an establishment basis. That is, a company operating establishments at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports insofar as the plant records permit such a separation. Census figures must, therefore, be expected to differ substantially from those prepared on a company basis, e. g., from consolidated reports which not only combine activities at different locations but also include the nonmanufacturing activities of companies primarily engaged in manufacturing. Census figures will also differ to some extent from other tabulations based on establishment reports, where the definition of an establishment as to location and line of activity are not so rigidly applied.

In 1947, as in earlier years, a minimum size limit for establishments was set for inclusion in the census. In other recent censuses, establishments having less than \$5,000 value of products were designated as out of the scope of the census. In the 1947 census, on the other hand, reports were

* Reprinted from *1947 Census of Manufactures*, "Fuels and Electric Energy Consumed," p. 1.

required from all establishments employing one or more persons at any time during the census year. In several of the apparel industries reports were obtained from jobbers, whether or not they reported any employment in 1947, since contractors are normally unable to report cost of materials and value of products shipped.

The change in the minimum size limit in 1947 as compared with 1939 has not, however, appreciably affected the comparability of the figures for these two years, except for data on number of establishments for a few industries. During 1939, establishments with no employees amounted to fewer than 5,000 and accounted for less than one-half of one percent of the value added by manufacture in that year. A preliminary study of the 1947 tabulations indicates that a somewhat larger number of reports showing less than \$5,000 value of products was tabulated for that year.

4. Industry Classification of Establishments

Each of the establishments covered in the census was classified in one of 458 manufacturing industries in accordance with the industry definitions embodied in the Standard Industrial Classification system with a few exceptions as noted in (3) above. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or more or less closely related group of products. This

product or group of products is in turn said to be "primary" to that industry. Accordingly, an establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of any other group of products. In a few instances, however, the industry classification of an establishment is determined not only by the products it makes but also by the processes employed in making those products.

5. Disclosure of Data for Individual Companies

The Bureau of the Census is prohibited by law from publishing any statistics that reveal the operations of individual companies. For this reason the statistics for some industry groups and counties are not shown. They are included, however, in the appropriate major industry groups, and in the State totals.

6. Abbreviations

The following abbreviations and symbols recur frequently both in the tables and footnotes:

n.a.	not available
n.e.c.	not elsewhere classified
M	thousand
mil.	million
----	zero or not applicable

Where the term tons is used, it refers to short tons of 2,000 lbs. The term barrels refers to barrels of 42 gallons.

Appendix B

CONVERSION FACTORS

Bituminous Coal—The amount of bituminous coal consumed was converted to its energy equivalent on the basis of 26,200,000 Btu. per ton. This represents the national average as computed by the Bureau of Mines and probably presents a fairly accurate picture for the area east of the Mississippi River. The greatest inaccuracies resulting from the use of this figure probably occurred in the figures for North Dakota and South Dakota and, to a lesser degree, in the figures for other western states where lignite predominates.

Anthracite Coal—The amount of anthracite coal consumed was converted to its energy equivalent on the basis of 25,400,000 Btu. per ton. This national average figure of the Bureau of Mines is perhaps more truly representative than the national average figure for bituminous coal since the deposits of anthracite are more concentrated geographically and subject to less variation in Btu. content.

Coke—The amount of coke consumed was converted to its energy equivalent on the basis of 25,800,000 Btu. per ton. This represents the national average figure of the Bureau of Mines for the inherent thermal value of coke. Thus, the energy measured in this instance, as well as in the instance of electric energy, is the energy available to the consumer and not the energy which went into the production of the fuel.

Fuel Oil—The amount of fuel oil consumed was converted to its energy equivalent on the basis of 6,200,000 Btu. per barrel. This represents a weighted average of distillate fuel oil at 5,825,400 Btu. per barrel and residual fuel oils at 6,287,400 Btu. per barrel based on the 1947 consumption by manufacturing industries. This value was also computed by the Bureau of Mines.

Electric Energy Purchased—The inherent thermal value of electricity (3,412.193 Btu. per kilowatt-hour) was used instead of following the Bureau of Mines' practice of converting electric energy on the basis of the energy used to produce a kilowatt-hour. The inherent thermal value of electric energy is the only measure of energy which has importance to the fuel consumer, the varying energy required to produce a kilowatt-hour in

different plants being of interest to the consumer only as it is reflected in the cost of electric energy. Therefore, in presenting unit costs it is the cost per Btu. of the inherent thermal value of electric energy which has been shown.

Gas—The amount of natural gas consumed was converted to its energy equivalent on the basis of 1,050 Btu. per cubic foot; manufactured gas was converted at 540 Btu. per cubic foot; and mixed gas (represents mixtures of natural and manufactured gas; includes all gas reported by establishments that purchase more than one type of gas; also includes some gas for which the type was not reported) was converted at 907 Btu. per cubic foot. An exception was made in the case of manufactured gas and mixed gases where the average cost per thousand cubic feet was below ten cents for a particular area or industry group. A price below ten cents per thousand cubic feet was considered presumptive evidence of the use of some blast furnace or other low Btu. content gas. In a few cases it was necessary to consider gases with a price slightly above ten cents per thousand cubic feet as being gases of a low Btu. content. This was necessary because in some areas and industries the average cost of more than ten cents was caused by extremely high costs of relatively small amounts and consequently was not a true reflection of the actual Btu. content. These disparities were immediately apparent when the industry and area figures were considered in juxtaposition and necessitated a slight deviation from the ten cent figure. In order to determine what proportion of the total manufactured and mixed gases in these areas to convert at the full Btu. value and what proportion to convert at 100 Btu. per cubic foot for low Btu. content gas, reference was made to the cost per unit for each metropolitan area and industry group. Those metropolitan areas and industry groups showing an average unit cost of more than ten cents were converted at 540 Btu. for manufactured gas and 907 Btu. for mixed gas with the exceptions noted above. Those showing a unit cost of less than ten cents were converted according to a formula based on the average unit costs of the areas or industries in the state with an average unit cost of more than

ten cents and a cost of two cents for the low Btu. content gas. The formula used for the allocation of this amount between full Btu. content and low Btu. content gas for conversion is illustrated below.
EXAMPLE: Pennsylvania

		<i>Average Unit</i>	
<i>Total Units</i>		<i>Price</i>	<i>Total Cost</i>
.02 (2,432.6 - X) ÷	.5285X	=	142.1
48.652 - .02X ÷	.5285X	=	142.1
	.5085X	=	93.448
	X	=	183.77

Where X = full Btu. gas to be converted at 907 in the case of mixed gas or 540 in the case of manufactured gas; remainder to be converted at 100.

Appendix Tables 1 and 2 present the adjusted total Btu. for mixed and manufactured gases in specific industries and areas. These adjusted totals represent the actual application of the above formula in each case where the cost was less than ten cents as well as to the exceptions noted before. The adjustment amount (shown in amount columns six of the appendix tables) was determined by dividing in half the difference between the total for the areas and the total for the industries. This amount was then apportioned on the basis of the percentage of the gas consumed in each area and in each industry.

APPENDIX TABLE 1
Adjusted Conversion of Low Cost Mixed Gas in Specified Metropolitan Areas and Industry Groups

METROPOLITAN AREAS and INDUSTRY GROUPS	Amount (in mil. of cu. ft.)	Average Cost per M cu. ft.	Amount Converted at 907 Btu.	Amount Converted at 100 Btu.	Total Btu. (in billions)	Adjustment to Balance State Totals	Adjusted Total Btu.
PENNSYLVANIA							
Area B—Mercer County	30,721.3	\$0.0215	117.7	30,603.6	3,167.1	+ 14.6	3,181.7
Area D—Allegheny County	448,637.9	.0467	29,805.1	418,832.8	68,916.5	+ 317.7	69,234.2
Area D—Westmoreland County	22,308.1	.0770	3,167.7	19,140.4	4,787.1	+ 22.1	4,809.2
Petroleum and Coal Products	4,710.7	.0164	none	4,710.7	471.1	— 2.2	468.9
Primary Metal Industries	495,767.6	.0459	32,779.6	462,988.0	76,029.8	— 352.1	75,677.7
OHIO							
Area E—Cuyahoga County	112,820.6	.0362	6,744.4	106,076.2	16,724.8	— 1,546.1	15,178.7
Area H—Mahoning County	182,009.1	.0426	15,242.7	166,766.4	30,501.7	— 2,819.6	27,682.1
All Other Counties—Lorain	128,208.8	.0358	7,477.5	120,731.3	18,855.2	— 1,743.0	17,112.2
All Other Counties—Scioto	6,213.4	.0741	1,243.8	4,969.6	1,625.1	— 150.2	1,474.9
Petroleum and Coal Products	1,112.9	.0466	76.5	1,036.4	173.0	+ 16.0	189.0
Primary Metal Industries	442,150.3	.0455	29,131.6	413,018.7	67,724.2	+ 6,243.0	73,967.2
ILLINOIS							
Area C—Cook County	208,666.3	.0455	15,216.0	193,450.3	33,146.0	— 984.5	32,161.5
Primary Metal Industries	202,115.7	.0324	6,225.6	195,890.1	25,235.5	+ 984.5	26,220.0
MICHIGAN*							
Area F—Wayne County	60,258.4	.1455	60,258.4	none	54,654.3	—19,802.7	34,851.6
Transportation Equipment	30,924.2	.0648	6,385.5	24,538.7	8,245.4	none	8,245.4
WEST VIRGINIA							
Area A—Hancock County	88,165.6	.0728	23,413.2	64,752.4	27,711.0	none	27,711.0
Primary Metal Industries	88,165.6	.0728	23,413.2	64,752.4	27,711.0	none	27,711.0
ALABAMA							
Area A—Jefferson County	35,337.1	.0894	15,946.4	19,390.7	16,402.5	+ 1,383.4	17,785.9
Petroleum and Coal Products	7,583.0	.0217	93.8	7,489.2	834.0	— 44.5	789.5
Primary Metal Industries	35,230.9	.1224	26,758.0	8,472.9	25,116.8	— 1,338.9	23,777.9
CALIFORNIA							
Area H—San Bernadino County	25,335.9	.0505	3,489.3	21,846.6	5,349.4	— 7.2	5,342.2
Petroleum and Coal Products	13,130.5	.0246	269.6	12,860.9	1,530.8	+ 2.0	1,532.8
Primary Metal Industries	12,264.8	.0799	3,261.2	9,003.6	3,858.3	+ 5.2	3,863.5

*Note: There was no area in Michigan with an average cost of less than ten cents per unit; however, Wayne County, in which approximately 99 per cent of the mixed gas in the state was consumed, had an average price of less than fifteen cents per unit. Therefore, the total Btu. content of the mixed gas consumed in Wayne County was reduced by the same amount as the gas consumed in the Transportation Equipment industry group, the average cost of which was six and a half cents per unit.

APPENDIX TABLE 2

Adjusted Conversion of Low Cost Manufactured Gas in Specified Metropolitan Areas and Industry Groups

METROPOLITAN AREAS and INDUSTRY GROUPS	Amount (in mil. of cu. ft.)	Average Cost per M cu. ft.	Amount Converted at 540 Btu.	Amount Converted at 100 Btu.	Total Btu. (in billions)	Adjustment to Balance State Totals	Adjusted Total Btu.
MASSACHUSETTS							
Area C—Middlesex County	15,106.7	\$0.0444	633.6	14,473.1	1,789.3	none	1,789.3
Petroleum and Coal Products	14,473.1	.0095	none	14,473.1	1,447.3	none	1,447.3
NEW YORK							
Area A—Erie County	137,906.1	.0393	4,640.6	133,265.5	15,832.4	—101.9	15,730.5
Petroleum and Coal Products	588.7	.0708	50.7	538.0	81.2	+ .5	81.7
Primary Metal Industries	138,776.9	.0437	5,585.8	133,191.1	16,335.6	+101.4	16,437.0
PENNSYLVANIA							
Area A—Erie County	3,100.2	.0431	162.9	2,937.3	381.7	— 9.1	372.6
Area D—Beaver County	59,670.4	.0570	5,029.6	54,640.8	8,180.1	—194.0	7,986.1
Area D—Allegheny County	21,807.5	.0350	744.1	21,063.4	2,508.2	— 59.5	2,448.7
Area E—Cambria County	128,842.1	.0138	none	128,842.1	12,884.2	—305.5	12,578.7
Area H—Dauphin County	39,834.7	.0298	892.6	38,942.1	4,376.2	—103.8	4,272.4
Area M—Northampton County	85,381.4	.0368	3,257.2	82,124.2	9,971.3	—236.4	9,734.9
Chemicals and Allied Products	2,432.6	.0584	183.8	2,248.8	324.2	+ 7.6	331.8
Petroleum and Coal Products	29,088.2	.0202	12.3	29,075.9	2,914.2	+ 68.7	2,982.9
Stone, Clay, and Glass Products	7,791.9	.0516	483.9	7,308.0	992.1	+ 23.4	1,015.5
Primary Metal Industries	303,126.8	.0352	9,081.7	294,045.1	34,308.6	+808.5	35,117.1
OHIO							
Area A—Lucas County	21,805.1	.0450	1,767.2	20,037.9	2,958.1	— 19.8	2,938.3
Area D—Butler County	14,426.9	.0150	none	14,426.9	1,442.7	— 9.7	1,433.0
Area H—Mahoning County	14,230.2	.0178	none	14,230.2	1,423.1	— 9.6	1,413.5
Area H—Trumbull County	18,500.0	.0133	none	18,500.0	1,850.0	— 12.4	1,837.6
Area J—Jefferson County	25,839.9	.0405	1,718.4	24,121.5	3,340.1	— 22.4	3,317.7
Area L—Lawrence County	4,832.2	.1027	1,294.1	3,538.1	1,052.5	— 7.1	1,045.6
Petroleum and Coal Products	55,072.5	.0188	none	55,072.5	5,507.2	+ 37.2	5,544.4
Primary Metal Industries	41,746.3	.0460	3,614.4	38,131.9	5,765.0	+ 38.9	5,803.9
Stone, Clay, and Glass Products	2,966.9	.1161	948.8	2,018.1	714.1	+ 4.8	718.9
INDIANA							
Area A—Lake County	300,997.2	.0440	17,160.8	283,836.4	37,650.4	— 25.7	37,624.7
Petroleum and Coal Products	4,712.0	.0351	168.2	4,543.8	545.2	+ .4	545.6
Primary Metal Industries	296,492.7	.0443	17,083.2	279,409.5	37,165.9	+ 25.3	37,191.2
ILLINOIS							
Area C—Cook County	34,877.5	.0758	4,766.0	30,111.5	5,584.8	—175.2	5,409.6
Area F—Madison County	7,277.1	.0380	320.7	6,956.4	868.8	— 27.3	841.5
Petroleum and Coal Products	22,050.7	.0311	510.9	21,539.8	2,429.8	+ 90.0	2,519.8
Primary Metal Industries	19,021.9	.0846	2,573.6	16,448.3	3,034.6	+112.4	3,147.0
MICHIGAN							
Area F—Wayne County	69,296.2	.0665	5,590.1	63,706.1	9,389.1	+939.5	10,328.6
Petroleum and Coal Products	63,049.7	.0400	3,614.0	59,435.7	7,895.3	—939.5	6,955.8
MINNESOTA							
Area A—St. Louis County	34,647.5	.0349	909.8	33,737.7	3,865.2	+ 7.4	3,872.6
Petroleum and Coal Products	3,439.2	.0250	31.0	3,408.2	357.5	— .7	356.8
Primary Metal Industries	31,199.9	.0361	904.1	30,295.8	3,517.7	— 6.7	3,511.0
MARYLAND							
Area A—Baltimore County	14,646.3	.0308	259.2	14,387.1	1,578.6	+ 19.4	1,598.0
Area A—Baltimore City	145,706.2	.0282	1,969.3	143,736.9	15,437.2	+189.4	15,626.6
Petroleum and Coal Products	14,244.4	.0169	none	14,244.4	1,424.4	— 18.9	1,405.5
Primary Metal Industries	142,930.4	.0187	none	142,930.4	14,293.1	—189.9	14,103.2
WEST VIRGINIA							
Area A—Hancock County	17,930.4	.0412	1,458.8	16,471.6	2,434.9	— 72.4	2,362.5
Area C—Kanawha County	5,226.9	.1024	1,649.9	3,577.0	1,248.6	— 37.1	1,211.5
Chemicals and Allied Products	4,514.7	.1067	1,284.1	3,230.6	1,016.4	+ 31.6	1,048.0
Petroleum and Coal Products	18,761.1	.0435	1,445.1	17,316.0	2,511.9	+ 78.0	2,589.9
KENTUCKY							
Area C—Boyd County	972.7	.0600	62.2	910.5	124.6	none	124.6
Petroleum and Coal Products	972.7	.0600	62.2	910.5	124.5	none	124.5
ALABAMA							
All other counties	2,159.7	.0629	789.7	1,370.0	563.4	+ 23.7	587.1
Chemicals and Allied Products	2,404.2	.0747	1,141.8	1,262.4	742.8	— 23.7	719.1
TEXAS							
Area G—Harris County	312.0	.0401	74.2	237.8	63.9	none	63.9
Primary Metal Industries	312.0	.0401	74.2	237.8	63.9	none	63.9
UTAH							
All other counties	58,638.1	.0345	7,750.1	50,888.0	9,273.7	none	9,273.7
Food and Kindred Products	33.0	.0970	23.1	9.9	13.5	none	13.5
Petroleum and Coal Products	28,687.0	.0211	291.7	28,395.3	2,997.0	none	2,997.0
Primary Metal Industries	29,867.3	.0472	7,384.5	22,482.8	6,235.9	none	6,235.9

Appendix C

COUNTIES INCLUDED IN EACH METROPOLITAN AREA, BY STATES

The grouping of counties according to metropolitan areas is based on the Metropolitan State Economic Areas which were developed jointly by the Bureau of the Census and the Bureau of Agricultural Economics for use in reporting many of the data from the 1950 Census of Agriculture, Population, and Housing. Metropolitan State Economic Areas consist of a city of 50,000 inhabitants or more, together with the county which contains the city and any other contiguous counties which are economically closely integrated with the principal city or cities. In the present study the Non-metropolitan State Economic Areas which are groupings of the remaining counties were not presented separately but were all grouped together under the section "all other counties." The figures for the metropolitan areas for each state do not always equal the state total due to the fact that in the original data in those counties in which only one or a few manufacturing establishments existed, data was withheld to avoid disclosure but was included in the total for that state.

NEW ENGLAND

Maine

Metropolitan Area A—Cumberland

New Hampshire

Metropolitan Area A—Hillsborough

Vermont

None

Massachusetts

Metropolitan Area A—Hampden, Hampshire

Metropolitan Area B—Worcester

Metropolitan Area C—Essex, Middlesex,
Norfolk, Suffolk

Metropolitan Area D—Plymouth

Metropolitan Area E—Bristol

Rhode Island

Metropolitan Area A—Bristol, Kent,
Providence

Connecticut

Metropolitan Area A—Fairfield

Metropolitan Area B—New Haven

Metropolitan Area C—Hartford

MIDDLE ATLANTIC

New York

Metropolitan Area A—Erie, Niagara

Metropolitan Area B—Monroe

Metropolitan Area C—Onondaga

Metropolitan Area D—Herkimer, Oneida

Metropolitan Area E—Broome

Metropolitan Area F—Albany, Rensselaer,
Schenectady

Metropolitan Area G—Bronx, Kings, Nassau,
New York, Queens,
Richmond, Rockland,
Suffolk, Westchester

New Jersey

Metropolitan Area A—Warren

Metropolitan Area B—Berger, Essex, Hudson,
Middlesex, Morris,
Passaic, Somerset,
Union

Metropolitan Area C—Mercer

Metropolitan Area D—Burlington, Camden,
Gloucester

Metropolitan Area E—Atlantic

Metropolitan Area F—Salem

Pennsylvania

Metropolitan Area A—Erie

Metropolitan Area B—Mercer

Metropolitan Area C—Lockawanna

Metropolitan Area D—Allegheny, Beaver,
Washington,
Westmoreland

Metropolitan Area E—Cambria, Somerset

Metropolitan Area F—Blair

Metropolitan Area G—Luzerne

Metropolitan Area H—Cumberland, Dauphin

Metropolitan Area J—York

Metropolitan Area K—Lancaster

Metropolitan Area L—Berks

Metropolitan Area M—Lehigh, Northampton

Metropolitan Area N—Bucks, Chester,
Delaware,
Montgomery,
Philadelphia

EAST NORTH CENTRAL

Ohio

Metropolitan Area A—Lucas

Metropolitan Area B—Franklin

Metropolitan Area C—Greene, Montgomery

Metropolitan Area D—Butler

Metropolitan Area E—Cuyahoga, Lake

Metropolitan Area F—Summit

Metropolitan Area G—Stark
 Metropolitan Area H—Mahoning, Trumbull
 Metropolitan Area J—Belmont
 Metropolitan Area K—Hamilton
 Metropolitan Area L—Lawrence

Indiana

Metropolitan Area A—Lake
 Metropolitan Area B—St. Joseph
 Metropolitan Area C—Allen
 Metropolitan Area D—Marion
 Metropolitan Area E—Vanderburgh
 Metropolitan Area F—Clark, Floyd

Illinois

Metropolitan Area A—Rock Island
 Metropolitan Area B—Winnebago
 Metropolitan Area C—Cook, Du Page, Kane,
 Lake, Will
 Metropolitan Area D—Peoria, Tazewell
 Metropolitan Area E—Sangamon
 Metropolitan Area F—Madison, St. Clair

Michigan

Metropolitan Area A—Saginaw
 Metropolitan Area B—Kent
 Metropolitan Area C—Muskegon
 Metropolitan Area D—Genesee
 Metropolitan Area E—Ingram
 Metropolitan Area F—Macomb, Oakland,
 Wayne
 Metropolitan Area G—Kalamazoo

Wisconsin

Metropolitan Area A—Douglas
 Metropolitan Area B—Dane
 Metropolitan Area C—Milwaukee

WEST NORTH CENTRAL

Minnesota

Metropolitan Area A—St. Louis
 Metropolitan Area B—Anoka, Dakota,
 Hennepin, Ramsey

Iowa

Metropolitan Area A—Woodbury
 Metropolitan Area B—Pottawattamie
 Metropolitan Area C—Polk
 Metropolitan Area D—Scott

Missouri

Metropolitan Area A—Clay, Jackson
 Metropolitan Area B—St. Charles, St. Louis,
 St. Louis City

North Dakota

None

South Dakota

None

Nebraska

Metropolitan Area A—Lancaster
 Metropolitan Area B—Douglas, Sarpy

Kansas

Metropolitan Area A—Sedgwick
 Metropolitan Area B—Johnson, Wyandotte

SOUTH ATLANTIC

Delaware

Metropolitan Area A—New Castle

Maryland

Metropolitan Area A—Anne Arundel,
 Baltimore,
 Baltimore City

District of Columbia

None

Virginia

Metropolitan Area A—Roanoke
 Metropolitan Area B—Arlington, Fairfax
 Metropolitan Area C—Chesterfield, Henrico
 Metropolitan Area D—Norfolk, Princess Anne

West Virginia

Metropolitan Area A—Brooke, Hancock,
 Marshall, Ohio

Metropolitan Area B—Cabell, Wayne

Metropolitan Area C—Fayette, Kanawha

North Carolina

Metropolitan Area A—Buncombe
 Metropolitan Area B—Forsyth
 Metropolitan Area C—Guilford
 Metropolitan Area D—Mecklenburg
 Metropolitan Area E—Wake

South Carolina

Metropolitan Area A—Richland
 Metropolitan Area B—Aiken
 Metropolitan Area C—Charleston

Georgia

Metropolitan Area A—Walker
 Metropolitan Area B—Cobb, De Kalb, Fulton
 Metropolitan Area C—Chattahoochee,
 Muscogee
 Metropolitan Area D—Richmond
 Metropolitan Area E—Chatham

Florida

Metropolitan Area A—Duval
 Metropolitan Area B—Hillsborough, Pinellas
 Metropolitan Area C—Dade

EAST SOUTH CENTRAL

Kentucky

Metropolitan Area A—Jefferson
 Metropolitan Area B—Campbell, Kenton
 Metropolitan Area C—Boyd

Tennessee

Metropolitan Area A—Shelby
 Metropolitan Area B—Davidson
 Metropolitan Area C—Hamilton
 Metropolitan Area D—Anderson, Blount,
 Knox

Alabama

Metropolitan Area A—Jefferson
Metropolitan Area B—Russel
Metropolitan Area C—Montgomery
Metropolitan Area D—Mobile

Mississippi

Metropolitan Area A—Hinds

WEST SOUTH CENTRAL

Arkansas

Metropolitan Area A—Pulaski

Louisiana

Metropolitan Area A—Caddo
Metropolitan Area B—Jefferson, Orleans,
St. Bernard

Oklahoma

Metropolitan Area A—Tulsa
Metropolitan Area B—Oklahoma

Texas

Metropolitan Area A—El Paso
Metropolitan Area B—Tarrant
Metropolitan Area C—Dallas
Metropolitan Area D—McLennan
Metropolitan Area E—Travis
Metropolitan Area F—Bexar
Metropolitan Area G—Harris
Metropolitan Area H—Jefferson

MOUNTAIN

Montana

None

Idaho

None

Wyoming

None

Colorado

Metropolitan Area A—Adams, Arapahoe,
Denver, Jefferson

New Mexico

None

Arizona

Metropolitan Area A—Maricopa

Utah

Metropolitan Area A—Salt Lake

Nevada

None

PACIFIC

Washington

Metropolitan Area A—King
Metropolitan Area B—Pierce
Metropolitan Area C—Clark
Metropolitan Area D—Spokane

Oregon

Metropolitan Area A—Clackamas, Multno-
mah, Washington

California

Metropolitan Area A—Alameda,
Contra Costa, Marin,
San Francisco,
San Mateo, Solano
Metropolitan Area B—Santa Clara
Metropolitan Area C—Sacramento
Metropolitan Area D—San Joaquin
Metropolitan Area E—Fresno
Metropolitan Area F—Orange, Los Angeles
Metropolitan Area G—San Diego
Metropolitan Area H—San Bernardino

DATE DUE

NOV 13 1963

SEP 25 '91

1. *A Survey of Changes* October, 1949.
2. *The Operation of the* Harold J. Shamberger and James H. Thompson, November, 1950.
3. *Indexes of West Virginia Business, 1935-1949*, by Ralph B. Tower, February, 1951.

